DOCUMENT RESUME

ED 224 185 EC 150 359

AUTHOR	Smith, Carl R., Ed.; Wilcots, Barbara J., Ed.
TITLE	Current Issues in Behavior Disorders--1982. Iowa Monograph.
INSTITUTION	Iowa State Dept. of Public Instruction, Des Moines. Div. of Special Education.
PUB DATE	Aug 82
NOTE	92p.
PUB TYPE	Viewpoints (120) -- Information Analyses (070)
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	Behavior Modification; *Emotional Disturbances; Federal Legislation; Hyperactivity; Interpersonal Competence; Learning Disabilities; Opinions; *Special Education; *Theories

ABSTRACT

Nine papers examine current issues in the education of children with behavioral disorders. Three papers deal with theory, three with application, and three contain responses of a classroom teacher, an administrator, and a special education professor, respectively, to the preceding six papers. Papers have the following titles and authors: "Mental, Emotional, and Learning Disabilities: School-Induced Handicaps" (M. Trippe and J. Mathey); "Research-Based Knowledge and Professional Practices in Special Education for Emotionally Disturbed Students" (K. C. Lakin); "To Punish or to Heal: The Issues and Dynamics of Educating Emotionally Disturbed Children" (V. Rezmierski and M. Rubinstein); "Pills or Skills for Hyperactive Children" (K. D. O'Leary); "Use of Behavioral Strategies with Behaviorally Disordered Children and Youth: A Perspective" (R. Simpson and G. Sasso); "Interpersonal Skill Training with Young, Behaviorally Disordered Children" (P. Strain and M. Kerr); "Science and Art in Teaching Behaviorally Disordered Youth" (D. Sodac); and "Synergetic Planning for Emotionally Disturbed Children: Some Thoughts on the Future of Our Work on Behalf of Children" (E. Shultz). (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED224185

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Iowa Monograph:

Current Issues in Behavior Disorders-1982

Editors

Carl R. Smith
Iowa Department of Public Instruction
Des Moines, Iowa

Barbara J. Wilcots
Iowa Department of Public Instruction
Des Moines, Iowa

August, 1982

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Carl R. Smith

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EC 150 359

State of Iowa
Department of Public Instruction
Grimes State Office Building
Des Moines, Iowa 50319

State Board of Public Instruction

Karen K. Goodenow, President, Wall Lake
William N. Cropp, Vice-President, Des Moines
Jolly Ann Davidson, Clarinda
Lucas DeKoster, Hull
Stephen C. Gerard, Sigourney
John Moats, Council Bluffs
Dianne L.D. Paca, Garner
Mary E. Robinson, Cedar Rapids
Susan M. Wilson, Waterloo

Administration

Robert D. Benton, State Superintendent and Executive Officer
of the State Board of Public Instruction
David H. Bechtel, Administrative Assistant
James E. Mitchell, Deputy Superintendent

Pupil Personnel Services Branch

Drexel D. Lange, Associate Superintendent

Special Education Division

J. Frank Vance, Director
Carol Bradley, Chief
Carl R. Smith, Consultant, Emotional Disabilities and
Chronically Disruptive

Publications Section

Sharon Slezak, Chief
Barbara J. Wilcots, Information Specialist
Ray Benter, Graphic Artist
Joyce Short, Compositor, Word Processing

Preface

The purpose of the Iowa Monograph Series is to provide a forum for the exploration of topics which are, in the opinion of the editors, relevant to the needs of direct service persons working with and for students with behavioral disorders. This particular monograph presents a selection of papers dealing with current issues in this area of special education from both theoretical and applied perspectives. With the exception of Dr. O'Leary's paper, these papers have not appeared in print before.

It is our hope that these papers will stimulate your thinking surrounding the decisions you implement in programming for students with behavioral disorders. It is also our hope that this monograph, along with earlier monographs, will lead to the improvement of educational services for such students.

--Carl R. Smith
--Barbara Wilcots

Iowa Monograph Series

The Identification of Emotionally Disabled Pupils: Data and Decision Making, Carl R. Smith and Jeff Grimes (Editors), 1979.

Iowa Study: Preliminary Report: Reintegration of Emotionally Disabled Pupils, Carl R. Smith, Maureen White, and Reese Peterson, 1979.

Strategies for Planning and Facilitating the Reintegration of Students with Behavioral Disorders, Maureen White, 1980.

On Reading and Writing, Clay Starlin, 1982.

Current Issues in Behavior Disorders - 1982, Carl R. Smith and Barbara J. Wilcots, 1982.

Contents

Current Issues: Theory **Page**

Mental, Emotional, and Learning Disabilities: School-Induced Handicaps
Matthew Trippe and John Mathey 1

Research-Based Knowledge and Professional Practices in Special Education for Emotionally Disturbed Students
K. Charlie Lakin 13

To Punish or to Heal: The Issues and Dynamics of Educating Emotionally Disturbed Children
Virginia Rezmierski and Marla Frudden Rubinstein 21

Current Issues: Application

Pills or Skills for Hyperactive Children
K. Daniel O'Leary 37

Use of Behavioral Strategies with Behaviorally Disordered Children and Youth: A Perspective
Richard L. Simpson and Gary M. Sasso 47

Interpersonal Skill Training with Young, Behaviorally Disordered Children
Philip S. Strain and Mary Margaret Kerr 59

Current Issues: Responses

Science and Art in Teaching Behaviorally Disordered Youth
Tim Virden 73

A Responsorial Hymn to P. L. 94-142
David G. Sodac 77

Synergetic Planning for Emotionally Disturbed Children: Some Thoughts on the Future of Our Work on Behalf of Children
Edward W. Shultz 83

Mental, Emotional, and Learning Disabilities: School-Induced Handicaps

by Matthew Trippe and John Mathey

Matthew Trippe is currently a professor in the School of Education at the University of Michigan, serving both programs of Special Education, Speech, and Hearing Science and the Educational Psychology Program in the Interpersonal Process Area. In addition to concerns about labels and attitudes toward disability, he is interested in concerns related to participation on the part of persons with disabilities. He is active in several advocacy groups and currently teaches and conducts workshops in human sexuality and disability.

John P. Mathey is presently director of Downriver/Dearborn Learning Center, Wayne County Intermediate School, a regional center that provides diagnostic and staff development services to school districts in Wayne County, Michigan. Current professional interests include enhancing positive self-esteem in children, parents, and professionals and exploring attitudes toward differences in self and others.

Introduction

This chapter is a result of work we have done in the past several years designing and implementing workshops for regular education teachers and administrators. The Education for All Handicapped Children Act of 1975 stimulated a number of staff development needs, and the focus we chose to address was that of personal and organizational attitudes toward difference. As a result of these efforts, a number of issues which seem central to public education at this time surfaced. These issues struck us as having profound implications for 1) the ways in which schools and classrooms are administered and organized, 2) a necessary realignment of the relationship between regular and special education, and most of all, 3) a reappraisal of the explosive growth that is taking place in labeling and serving children as handicapped. If some of these critical underlying issues can be precisely identified and confronted forthrightly, we believe we have within our grasp the potential for making major needed changes in public schooling as we know it today. This chapter is one attempt to do so.

It is our view that much of what is currently designated mental, emotional, or learning disabilities is school induced and has been manufactured. The reasons for such manufacture are organizational, political, and economic. The widely divergent opinions among authorities over the estimated prevalence of children with "real" handicaps rendered this observation inescapable. These estimates, in the area of learning disabilities, for example, range from something less than 2 percent of the children in school, all the way to 25 percent or more, depending on definition (McCarthy and McCarthy, 1969). In our view, the more conservative estimates are elitist and mystifying, and the more liberal are benevolently opportunistic.

Be that as it may, from a scientific point of view, any one definition is as true as any other definition. The test of any definition is its helpfulness or its usefulness — a goal of science being to arrive at definitions that are increasingly helpful. What is helpful in human affairs, however, comes from our values, and here we cannot look to science for answers, only guidance. Science can help clarify alternatives and consequences, but cannot determine goals. Goals differ among individuals and among individuals in different roles and groups. We all, to some extent, "define" our own reality and then treat that reality as though it were in fact "real" (Watzlawick, 1977).

In Part I of this chapter, the issues of appropriate education and appropriate classroom behavior are addressed. A case is made for seeing emotional, mental, and learning impairments as school related, defined, and induced. Then, the demands of P.L. 94-142, as applied to school-defined disabilities, are related to the apprehensions classroom teachers have about this legislation.

In Part II, learning disability as a concept is closely examined. Circumstances related to its invention are identified, issues associated with definitions are raised, and problems in arriving at a differential diagnosis are explored. Problems in distinguishing learning disability from both emotional impairment and mental impairment are presented first. Then the issue of differentiating learning **disability** from **problems** in learning or learning **difficulties** that do not constitute "handicap" are discussed. Advantages of being diagnosed learning "**disabled**" are identified, and learning "disability" is examined from the perspective of the concepts of illness and disability.

Part I
Issues, Definitions, and Apprehensions

Appropriate Education

A basic problem for public education today is how best to secure an **appropriate** education for all children.

One approach has been to broaden the concept of who or what is normal, anticipated, expected, or tolerable and then to work toward establishing meaningful services that incorporate a broad range of individual differences in common environments. The other has been to broaden the range of who or what is considered unacceptable, handicapped, disabled, or deviant and to process, identify, and provide special services in a range of environments for students so diagnosed and labeled. Special education has promoted the latter as a short-range goal for purposes of early identification, treatment, and cure, while for the most part advocating the former as a long-range goal. With P.L. 94-142, we now have legislated social policy that can broaden the concept of what is normal in the regular classroom. But the law requires labeling of individual pupils as "handicapped" to secure this right, thus creating circumstances which foster the necessity for viewing increasing numbers of children as handicapped.

We have grown accustomed to regular education being responsible for "normal" students and special education being responsible for "the handicapped." This responsibility includes paying for whatever extra costs are involved in the education of pupils with disabilities. Research has failed to document that pupils with disabilities are more effectively served in segregated special education programs (Dunn, 1968; Guskin and Spicker, 1968).

More importantly, questions of value and the social desirability of segregation and segregated programs were raised (Hart, 1978). Thus, this lack of clear educational advantage, along with other social considerations, through a program of advocacy and a series of court decisions, led to the enactment of P.L. 94-142 in 1975.

The law guarantees a free and appropriate education for all children with handicaps including those presently unserved and underserved. It also guarantees that the handicapped child's education take place in as normal a setting as the child can handle. It would seem that the need to legislate that handicapped children are entitled to a free and **appropriate** education is based on an underlying assumption that education for all other children, except the handicapped, presently is appropriate and that "handicaps" are what prevent children from receiving an appropriate education. If one's education is not appropriate, then it must be due to the presence of a handicap.

Would anyone argue that the government at this point would knowingly not guarantee an appropriate education for all pupils? The 1954 Supreme Court desegregation decision found that separate was not equal; that is, not **appropriate** for black children. Civil rights for women and for persons with disabilities followed the civil rights movement for racial and ethnic minorities. In addition to confronting the stereotyping and discrimination in schools as a result of racism, sexism, and handicapism, what groups remain for whom education is not appropriate?

This is a difficult question to answer, yet clearly the circumstances of children falling between 2 percent and 25 percent estimates for learning "disability" cannot be ignored. Of the estimated eight million children with disabilities in need of special education, more than half of the disabilities (emotional, learning, and mental impairments) are related to school expectations for learning and behavior (Stanford Research Institute 1977). If children with speech and language problems are also considered, the children with obvious physical and sensory impairments constitute only ten percent of the estimated eight million children in need of special education services. Ninety percent of the children thought to be in need of special education are considered "handicapped" simply because they do not meet the expectations of the regular classroom for learning, communication, and behavior! Of course serious impairment in any one of the areas of learning, communication, or behavior can be handicapping, not only in school, but in life. That is not the issue. We would rather ask, are these impairments something that education has a mission for ameliorating even though appropriate skills and understandings are yet to be discovered? If this perspective is the case, what value is there in classifying these children as "handicapped?" We believe that because "handicapped" is a conceptualization rooted in the field of medicine, it carries with it the idea that educational interventions and competence are insufficient to the task, and invoking the medical model readily explains our difficulties and failures. If the impairment in functioning is the consequence of a biomedical deviation, (i.e., a "handicap") education can readily attribute its lack of success to the biomedical deviations.

Since a large proportion of children with disabilities come from families living at or below the poverty level, present social policy seems to favor being handicapped as a more honorable state than being poor. Further, schools have the power to determine who is and who is not to be considered handicapped. If the issue is appropriateness of education for those children experiencing difficulties in school, what difference does it make whether the need is because of handicap or because of a whole host of other conditions or circumstances?

Education and Medicine

The thoughts and meanings that surround the term "handicap" need to be carefully examined because it is a social concept primarily associated with the field of medicine, not education. Rhodes and Gibbons (1972) have observed that society relies heavily on a number of separate professionalized social systems to serve, contain, and manage the deviants who pose a threat — real or imagined. They identified education as one social system along with medicine, social welfare, legal correction, and religion. Each of these professionalized social systems has its own professional literature, its own conceptualization of deviance, its own theories as to cause, its own methods of intervention and its own service delivery systems. The incisiveness of this conceptualization is that it clearly identifies the operation of and necessity for constancy within the system. From this conceptualization of deviance flows theory and interpretations as to basic cause, derived methods of intervention, and criteria for determining restitution and return to normal status. The same behavior can be seen as resulting from ignorance by

education, from sin by religion, from crime by the legal-correctional system, and from disease by medicine. "Handicap" as a consequence of disease, deformity, or injury then lies within the province of medicine. For special education to attend to the education of the disabled or "handicapped," in this view, is to attend to individuals conceptualized by one professionalized social system (medicine), with the theories, philosophies, and methods of another (education). Rhodes' and Gibbons' analysis, however, indicates that conceptualizations make sense only within the confines of the professionalized social system that gives rise to them. Shifting from one system to another introduces error and confusion. These observations are pertinent for our present purpose since they help clarify the issue of attempting to provide educationally for individuals conceptualized according to medical criteria and considerations. It is our view that the predisposition to use "handicap" as a cause or explanation for educational difficulties is inappropriate and unduly complicates educational practice. More on this later, but for now, it seems clear that the priority assigned to "handicap" by schools as an entitlement to special services comes from the belief that it is justifiable to experience difficulties in school because of a handicap and that the presence of a handicap makes the likelihood of school difficulties highly probable.

Since "handicap" according to the medical model is rooted in impaired biological and psychological processes, we are encouraged to believe that these impairments determined through medical procedures have a reality all their own, independent of institutional, psychosocial, or cultural considerations.

The medical model or paradigm of research and practice is predominately the diagnosis and treatment of disease or disorder that results in changes in biological function and structure. It rests on a dualism between mental and bodily functioning in which the body is analogous to a machine whose parts can be studied separately. These parts constitute the whole and can be analyzed into a series of separate mechanistic parts with cause-and-effect relationships (Pellitier, 1979). Disease is a consequence of a breakdown of the machine and the doctor's task is to repair it. Emotions, consciousness, and psychosocial variables are, at best, viewed as nuisances and interferences and are abitrarily excluded in order to focus on specific areas in search of the smallest isolated causative component — a specific bacteria or virus. Since all bodies are considered essentially the same, the same intervention is applied to whomever is found to have similar organic signs and symptoms.

"Handicap" then, occurs as a result of anomolies, disease, or injury to the physical body. No longer sick, the person with a handicap is left with a condition that is a deviation from some clearly defined biomedical norm. Education has come to consider these deviations as obstacles to the child's participation in regular school environments. "Handicap" is established by medical procedures that are capable of determining verifiable biomedical deviations. These deviations are believed to require specialized educational interventions that regular teachers are incompetent to provide. Because of this, special education was developed to provide the expertise, understanding, and skill necessary to facilitate learning only for children with "handicaps."

Appropriate Classroom Behavior

State laws require that all children come to school, but schools as social organizations require appropriate student behavior and learning characteristics for continued attendance in regular classrooms. Because learning is the work of students, how fast one learns, the ways in which one learns, and one's attitude and behavior in school have become criteria for deciding what is or is not appropriate student behavior. This has become increasingly more true over time as success in school has become the single most accessible avenue for movement into viable adult occupations and work roles. Forget for a moment that school expectations for acceptable learning rate, mode, style, and attitude vary considerably from school to school and classroom to classroom. The fact is that schools do define students who do not meet the expectations of the regular classroom as "deviant" or "handicapped" — mentally handicapped if the learning rate is found to be too slow, learning disabled if the mode or style of learning is too uneven or different, and emotionally disturbed or behavior disordered if the child's behavior or attitude toward self, others, and/or toward learning is thought to be inappropriate. P.L. 94-142 now mandates that the schools provide students defined deviant or handicapped by the school, an appropriate education in the least restrictive alternative placement.

We start with laws stating that all children must attend school. Then the schools decide who shall attend in regular classroom. The children that fail to meet established criteria are seen as handicapped and are diagnosed and so labeled. This labeling brings them under the umbrella of the civil rights movement for persons with disabilities, a movement that seeks to ensure equality under the law for all persons with handicaps. The law now says that children with handicaps shall receive an appropriate education alongside other students, whenever possible, and to the extent that the child can handle it. The law not only requires that the child have a handicapping condition, but also, as a result of that condition, the child must be educationally handicapped: that is, the condition must have an "adverse effect" on the child's educational performance. The "handicap" must be truly handicapping in school. As a consequence of both requirements, the child is in need of special education. Note, however, that "handicapped" is used in two different ways; 1) as a condition of biological or psychological deviation (child with a handicap) and 2) as a limitation or obstacle to the achievement of a desired goal (adverse effect on the child's education). The term is sometimes used to mean a label for a person, and sometimes to mean the consequence of a situation in which the achievement of a specific goal is blocked.

School Defined Disability

Children with mental, emotional, and learning impairments must be viewed somewhat differently from children with other handicaps when considering the demands of P.L. 94-142. In each of these three categories of disability, the impairment is a statement that the child is unable to meet the expectation of schools for participation in regular classroom. Thus, the classrooms cannot be adjusted to meet the needs of the children.

Other categories of disability relate to physical and sensory impairments — a biomedical characteristic of the child not limited to the school setting. Yet, these categories of disability as previously noted account for only ten percent of the estimated population of children with handicaps. For the remaining 90 percent, schools have effectively in the past enforced their norms by embracing the medical model of illness (mental deficiency and mental illness for mental and emotional impairments) and have now established a medical or illness basis for learning impairments. In each instance, the net effect is to blame the victim for the failure of accommodation (Ryan, 1976; Bowe, 1978). These impairments are school-defined, or we might say school manufactured. These children fail to meet expectations for appropriate learning rate, learning style, or learning attitude. Rather than being seen simply as not having characteristics necessary for participation in regular classrooms and in need of alternative solutions, schools have succeeded in having these children referred to special education and labeled as handicapped. It is the consequence of these procedures that now constitues the shock that must be reabsorbed when regular teachers are asked to mainstream children with mental, emotional, and learning impairments. It is clearly an instance of having to contend with problems that are the consequence of prior solutions. The prior solution in this case is the utilization of the medical model to justify lack of success with certain kinds of children.

The Apprehension of Regular Teachers

It should come as no surprise then that regular classroom teachers are resistant, frightened, and angry over having to provide for children with handicaps in their classrooms (Mathey, 1977). The process of identifying children as having special needs *because* of a handicap and seeing them as in need of special education effectively communicates to regular classroom teachers that 1) they do not possess the skills necessary for these children to receive an appropriate education; and that, 2) their primary function is to be sensitive to characteristics associated with these handicapping conditions. Specially trained personnel then provide the technical help these children need.

Until about 25 years ago, the bulk of special education services in schools were directed to children with mental impairments. The effect of creating special classes for children with mental impairments was to legitimize an expectation of a minimal acceptable rate of learning in the regular classroom. This did much in the eyes of teachers who were struggling with interferences and disruptions created by children who could not keep up and for whom teachers were unable to determine appropriate learning methods or goals. However, this practice was only partially successful in eliminating children who posed serious problems for teachers in regular classrooms.

Over the past 25 years, there has been tremendous growth in classes for children with emotional problems — children who disrupt class routine, interfere with the learning of other children, defy the teacher, or who, because of excessive fears and anxieties, do not participate or learn. One effect of this growth has been to legitimize within the regular classroom expectations for appropriate classroom behavior and attitude toward learning. Now we are experiencing similar growth in special education for children with learning disabilities. One effect of this growth is to legitimize certain standards of learning style or method as appropriate for the regular classroom and other ways of learning as outside the province of the regular classroom.

For each of these three groups, there is no question that, for the extremes, accommodation in the regular classroom would be most difficult or impossible under the best circumstances. The difficulty, however, is that we are tempted to view the entire group as having the characteristics of the most extreme. Further, by seeing the handicap as a biomedical deviation within the child, we are not encouraged to explore alternative patterns of classroom organization, instructional methods or classroom management. The difficulty lies within the child. The child is blamed, the circumstances go unchallenged, and any stressor that might foster change is effectively defused. The belief that children with handicaps are different and that these differences are best taken care of outside the regular classroom or with highly specialized resources is given support. We are encouraged to believe that it requires different theories for understanding and different practices and procedures for effectively reaching these children. (Sarason, 1978)

It is within this context that regular teachers are being asked to take children with handicaps back into their classrooms. This is a momentous change! In our view, such change is doomed to failure under existing circumstances. Without teachers who believe in the child's right to an education in as normal a setting as possible and who are willing, as a consequence of this belief, to entertain the necessity for change themselves, such practice amounts to the needless sacrifice of children.

PART II

Learning DisabilityExamined

Creating Learning Disability

Successful elimination of pupils with mental retardation and emotional disturbance from regular classrooms did not leave these classrooms problem-free. Problem children remained, but there was reluctance to apply either of the available labels. Earlier studies in mental retardation had identified two major etiologic groups, one related to a constellation of environmental, familial variables, and the other to a constellation of variables suggestive of physical insult and injury resulting in brain damage or neurologic disorder. If brain damage could cause severe learning problems of such extensiveness and degree to render the individual mentally retarded, could not "minimal" brain damage account for learning problems in children whose intelligence was not nearly so depressed? Once the question was asked, special educators, psychologists, neurologist, pediatricians, and even optometrists and physical therapists, among others, were more than ready to respond in the affirmative. The medical model now became available for this new group of children as it was

for the other two groups who also could not be expected to adapt or achieve because of a "disease" or illness. The intent was not to provide help for all children at risk, only for those who "could not help it" because their malfunction was a consequence of injury and insult to the brain and thought to require highly specialized interventions. We have become socialized into accepting the idea that it is more justifiable or acceptable to have a learning problem due to a learning "disability" with the implication of underlying biological deviation than it is simply to have problems with learning. And, if it's a specific learning disability or because of a central nervous system disorder, it is all the more honorific. In fact, the more closely the term resembles a medical disease or condition, the more authoritative and legitimate it sounds. Minimal brain dysfunction (MBD) was an earlier term for children curently labeled as "learning disabled," and regardless of the particular term used, and there have been many to designate learning disability, MBD was the explanation for their problems.

Consider the term dyslexia. It sounds like a complicated medical condition and, for many, it is so viewed. Yet for others and operationally in many research investigations it simply means a failure to read subsequent to instruction, or reading at a level several years below grade level or expectation. That *some* instances of reading failure may be found to be related to organic conditions in no way means that everything called dyslexia is organically based. Learning disability as a disability derives legitimacy and enhanced status by evoking the medical model.

Some years ago, Thomas Szasz (1960) observed that modern psychiatry was in the position of defining as mental disease or illness many problems and concerns that in the past were attributed to witchcraft and demonic possession. In defining these problems as disease, medicine became the social system responsible for their treatment and care. He went on to note that there is very little that problems in living have in common with what medicine typically considers disease. What was done was to take personal, social, and ethical problems in living and to define them arbitrarily as disease. Conceptualized in this manner, an attitude is fostered that the disease is within one self, and that one can't help it. Thus, by conceptualizing problems in living as illness, medicine defined a set of feelings and behaviors as coming within its jurisdiction to treat and cure and conveyed to individuals that one's problems are not one's responsibility but rather are the consequence of a disease. In this process, the disease (mental illness) became the cause so that now we think nothing of characterizing disordered behavior as being caused by a mental illness. In a similar manner, many medically oriented professional groups have coined the term learning disability for some problems in learning and now the disease (learning disability) with its implication of MBD becomes the cause of the failure to learn. This was done by asserting that biomedical deviations are related to numerous instances of learning failure. This maneuver was a logical extension of the successful utilization of the medical model in the areas of mental retardation and emotional disturbance.

In their review of several dozen studies over some 17 years, Herbert and Ellen Rie (1980) concluded that "There is no syndrome of minimal brain dysfunction; there are any number of determinants of hyperactive behavior; learning disorders occur for many different reason (p.1X)." A review of this text (Somatics, 1980) states: "Some 17 years ago the term 'minimal brain dysfunction syndrome' appeared. During the years intervening between then and now, this concept has had a brutalizing and tattered history - brutalizing, because the concept categorized children as neurologically damaged; tattered, because the concept was never consistently defined or fully substantiated.

Gradually, the insufficiency of the concept of minimal brain dysfunction became more obvious, leading some professionals to characterize it as 'a sophisticated statement of ignorance,' a 'myth' based on invalid diagnostic criteria and the 'unwitting confusion of psychologic construct with a biomedical fact.'"

The review ends with: "One cannot overestimate the special importance of this 'critical view' provided by Herbert and Ellen Rie. Every school district should have this handbook available, lest they end by harming the young humans they are supposed to help."

Defining Learning Disability

Most definitions of learning disability include that 1) the child is functioning at a normal or above normal level of intelligence: 2) performance across both skill and academic areas is uneven; 3) there is a discrepancy between performance and expectation; and 4) this discrepancy is not due to other known disabling factors.

Some years ago, a group of special educators were officially assembled to develop a set of recommendations for defining learning disability. The discussion moved to an examination of how learning disability is different from both mental retardation and emotional disturbance. One of us made the suggestion that if, in the best judgement of the people involved, it was thought that if the child *couldn't learn* he would probably be seen as **mentally retarded**; if he *wouldn't learn*, he was more than likely to be seen as **emotionally disturbed**; and that if he *wasn't learning*, and it was thought he *should* be learning, more than likely, he would be seen as **learning disabled**. The attempt at the time was to be humorous, but we have not read or seen much over the years that would cause serious reconsideration of this rather uncomplicated and nonmystical approach to differential diagnosis. We mention this to point out that the diagnosis of learning disability is a differential one among learning disability, emotional disturbance, and mental retardation. It is also a differential one between a learning disability and a learning problem.

Differentiating Learning Disability from Emotional Disturbance

The definition of learning disability requires that for a child to be classified "learning disabled" the discrepancy between performance and expectation is not a consequence of other known handicapping

conditions. Physical and sensory disabling conditions can, with attention, be ascertained with a relatively high degree of accuracy, but how does one determine that the discrepancy is not associated with emotional disturbance? To begin with, learning disability is a more favorable label than mental disturbance. Mental disturbance suggests intra-personal and inter-personal turmoil and parental or family psychopathology. Next, it is rather pointless to ask if a particular child is really learning disabled or emotionally disturbed and to expect that the question can be answered accurately and reliably by presently available clinical procedures and evaluations. It is rare for the data to fulfill the conditions of our neat, discrete categories, and the determinants are hooked into social, cultural, and situational variables that are extremely susceptible to bias and distortion.

This complicated process is a good example of the needless expenditure of resources and energy demanded by education's romance with the medical model and the consequent involvement of governmental bureaucracy. Not only is the decision extremely complicated and difficult to make, it is of minimal value in making educational decisions once it is made. If, however, the evaluation procedures concentrated on illuminating the relationship between the problems in learning and feeling about self, logically derived educational interventions could be instituted much more readily. Thus, if the assessment procedures indicate that the child's self-esteem and self-concept need attention before the child can undertake serious learning, then the problem might be best seen from the point of view of the things that we do with children to foster emotional growth, self-esteem, self-understanding, and confidence. If, on the other hand, it is thought that improvement in learning will bring about favorable changes in self-concept, then it would be best to concentrate on the child's learning and do the kind of special things that are done to improve learning and cognitive development. More often than not, however, nature is not nearly so respectful of our neat categories, preferring variety and interrelatedness. Yet, differentiate we must. To be considered learning disabled, a child's learning problems must not be a consequence of emotional disorder. But how do we know whether or not the child's problems are a consequence of emotional or personality variables? What is meant by emotional? How can personality or dynamic psychological variables be excluded?

If someone were to experience upsetting physical complaints and seek medical assistance, the first step undertaken by the physician would be to look for physical evidence to explain the signs and symptoms. Finding none, it is likely that the physician would suggest that the possibility of an emotional basis be explored. That is, the possibility that the symptoms might be due to emotional factors is considered after the fruitless search for physical cause. It has been reported that from 60 percent to 90 percent of visits to physicians' offices are due to stressful emotional factors (Pelletier, 1979). The point is that in medical practice, emotional factors are what is left to consider after physical factors have been ruled out. In diagnosing learning disability, physical factors are assumed after emotional factors are ruled out. This suggests that persons working within the education system can do what persons working within the medical system are unable to do. Can it be that we in education are more skilled in utilizing these medical procedures than medical practitioners themselves are? Our view is that we are not so skilled at *ruling out* emotional factors as we are at simply *deciding* that the child's problems are not due to emotional problems. Another way of saying this is that if a child is having learning difficulties but seems bright, is pleasant, adaptable, presentable, likeable, and isn't troublesome, then the tendency would be to favor his or her being learning disabled rather than emotionally impaired. Or, if he or she is troublesome and still likeable, then frustration over not learning may be used to justify the troublesome behavior and still favor seeing him or her as learning disabled. In any event, if it were possible to eliminate emotional factors, it seems highly unlikely that the kind of individual studies necessary to effectively rule these out are ever done.

Back to Szasz's observations. First, he has shown how one professionalized social system, by defining certain kinds of problems as disease or illness, lays exclusive claim to the treatment of and responsibility for that condition. Second, through the process of arbitrarily defining these problems as disease, the disease comes to be viewed as the "cause" of the condition. Thus, to define learning significantly below expectation as learning disability, the learning disability becomes the "cause" of the problem in learning. The third point, and the one we wish to explore in some depth concerns the variables attributed to the development of mental illness.

Much of the psychiatric jurisdictional claim for the treatment of "mental illnesses" is based on the fact that disturbed behavior can occur as a consequence of organic disease and physical changes. Psychiatrists, being medically trained, so the argument goes, have special expertise in identifying and addressing these physical deviations. Yet, psychiatrists, for the most part, show little interest in the treatment of such cases. Most psychiatric theorizing and treatment is in the realm of problems in living and human relationships. The variables investigated and the methods of treatment can be seen as the exploration of circumstances relating to the care and nurture of persons for positive and effective growth and development, both personally and socially. Our purpose is not to dwell on psychiatry's anachronistic status among the medical specialties, but rather to identify a similarity between educational and psychiatric concerns—the care and nurture of persons for positive and effective growth and development.

Problems in living are a consequence of the human condition and can be seen as expressions of a person's struggle with the problem of how he or she should live. Yet schooling more appropriately is a social invention, more specifically, an educational intervention. To diagnose children's problems in school as emotional disturbance or mental illness is risky on two counts; 1) the inappropriateness of the medical model for problems in living and 2) the inappropriateness of accepting schooling as we know it as a fixed aspect of the human condition rather than as an institutionalized professional social service delivery system.

This shared concern between psychiatry and education gets lost when problems in learning are conceptualized as a "handicap" and viewed from the

perspective of the medical model. The thrust shifts from a concern about conditions and climates and circumstances for growth to an examination and detailed study of the person for biomedical deviations. Such study on the surface is undertaken with the belief that through understanding cause, treatment can be instituted.

If children were seeds and our business were growing plants, what sense would it make to examine the seed or plant in great detail should it fail to grow and thrive. Only after assuring ourselves that all we know about what our specific plant's needs and requirements are for soil, minerals, moisture, and sunlight have been fulfilled would we be justified in submitting the seed to careful study and scrutiny. When children are considered handicapped and we search for causes for the handicap how well have we satisfied ourselves that all of the necessary conditions for positive growth and development have been satisfied? That the psychiatric profession as one branch of the medical profession shares our concern with climates for human growth and development in no way obviates our responsibility to ask questions about fulfilling the necessary conditions for growth. We in no way are suggesting that psychiatrists cannot be helpful in such explorations. We only wish to clarify that it is not in searching for the cause of disease or determining who is really sick that psychiatry can be helpful. It is in the creation of proper environments for growth. Classifying the child as handicapped evokes the medical model and directs our investigations in the direction of disease-causing conditions. We, who are concerned with the education of children, have allowed the confusion within medicine that considers mental illness as "disease" to muddy up our waters.

Differentiating Learning Disability from Mental Retardation

The issue of differentiating learning disability from mental retardation is important since learning disability is defined as occurring in the context of normal intelligence. In the previous section, an attempt was made to identify problems associated with the implicit acceptance of the medical model as applied to emotional disturbance. Mental retardation conceptualized as individual pathology or disease raises other important issues.

The mental retardation label, like emotional disturbance, is more stigmatizing than learning disability. It is readily associated with lack of intelligence, incompetency, and stupidity. By definition, it refers to below average general intelligence originating in the developmental period together with impaired adaptive behavior.

Without going into great detail the value of intelligence tests rests on their ability to predict the likelihood of success in school as we know it. An I.Q. of 85 is one standard deviation below the mean of 100 and defining normality as scores above 85 yields approximately 16 percent of the population as subnormal. A more traditional definition of 70 I.Q. yields approximately 2.5 percent of the population as mentally retarded. Thus, on the basis of intelligence test scores alone, mental retardation prevalence rates are determined by the cutoff level specified in whatever definition is adopted.

The same goes for adaptive behavior. Adaptive behavior refers to personal independence and social responsibility or ability to cope in a variety of social circumstances. Actual measurement of adaptive behavior is much more difficult but important if the individual's ability to cope intelligently with life is a serious consideration. Based on the Riverside epidemiological study (Mercer, 1973), the traditional three percent criterion on both intelligence tests and adaptive behavior was recommended for universal adoption. Identifying persons as retarded who fall in the lowest three percent on I.Q. tests and in the lowest three percent on a measure of adaptive behavior yields a crude prevalence rate in the general population of roughly one percent. This level has the highest degree of consensus among professionals, most closely approximates actual labeling practice in the community and is least likely to result in an over representation of members from lower socioeconomic groups. Finally, this level succeeds in identifying those who are not able to manage their own affairs and, as a conseqeunce, are in need of supportive services and supervision.

The Riverside study used both an agency survey and a field survey to determine the prevalence of mental retardation. The medical model was found to be inadequate for explaining the complexities of the agency data. A social systems model was employed to interpret the findings from the agency labeling practice survey. In this model, mental retardation is viewed as social deviance and refers to the process by which a person is so labeled because his or her behavior deviates from the norms of a social system. Retardation is a status in a social system held by a person who is so identified and treated by others in the system. It does not necessarily describe individual pathology. The study was done between 1963 and 1965, and it was found that more than half of all persons identified as retarded were identified by the public schools. Of these nominees, three-fourths were not named by any other social organization or by neighbors. Further, the public schools relied almost exclusively on I.Q. tests alone as the basis for labeling children mentally retarded.

Since that time, there has been considerable controversy over tests, testing, cultural bias, and the disproportionate representation of lower socioeconomic and minority children in special classes for mental retardation. This controversy exploded in numerous court tests, professional challenges, legislation, and administrative decisions, all directed to the illumination and elimination of discriminatory practices against children of racial and ethnic minorities, the poor, and the working classes. Public Law 94-142 was in part an attempt to incorporate and provide additional legislative safeguards against the injustices identified and contested over the years since the passage of the Civil Rights Act of 1964.

No longer able to relegate many children of low status parents to classes for the retarded, it appears to us more than coincidental that the same period of time has witnessed dramatic growth and expansion in the field of learning disabilities. Limited accessibility to the label of mental retardation can be seen as directly related to the expanded utilization of the learning disability label. The children are still there, they have not changed nor has there been any dramatic alteration in the nature of

public schooling to accommodate greater diversity. The need for services for children identified as learning disabled in part is a consequence of changes in social system labeling and not, as some would have it, the discovery of a new deficit or disease that ressurrects the medical model in education. Given the culture laden bias of both I.Q. tests and public schools, large numbers of children are still in need of help and assistance.

Interestingly, Mercer (1979) reported that a bill was introduced in the California legislature that would restrict classes for the mentally retarded to children scoring from two to three standard deviations below the mean on an I.Q. test. It was not passed because of major opposition by Anglo-American parents of children with intelligence test scores between 70 and 85 who did not want their children excluded from special education classes. Believing that their children benefited from these classes, these parents were willing to continue having their children labeled mentally retarded, rather than lose the services of special education.

Learning Disability or Learning Difficulty?

Differentiating learning disability from emotional disturbance and from mental retardation assumes that a handicap exists and attempts to determine the most accurate label. Some of the problems associated with this complex task have been discussed. Differentiating learning disability from learning difficulty begins with the learning problem and asks if it is of sufficient degree or nature to constitute handicap. Making this distinction is also tenuous and complicated.

Problems in learning that arise from cultural differences, according to the federal definition of learning disability, disqualify a child from being diagnosed learning disabled even though being learning disabled carries with it the opportunity for special help and assistance through special education. The key here is that the extra help is *through* special education. The Congress of the United States favors categorical aid to schools resulting in different programs of help or support for poverty areas, bilingual programs, career education, vocational education, and handicapped education to name a few. Each of the variety of federal programs carries with it its own rules, procedures, entitlements and the like. Such fragmentation cannot help but have unintended results. It would seem that implicit in this view that excludes cultural differences is the belief that handicap is the consequence of a biomedical deviation and that special education services are restricted to serving children in school that have medically defined deviations that require special assistance. Yet, as noted previously, deviance can also be viewed from a social system perspective. In this context then, the question becomes arbitrary. Why is a child a "handicapped" child because he or she has problems in learning as a consequence of certain inferred conditions and not a "handicapped" child because the learning problems are associated with cultural heritage, socioeconomic differences or differences in native language?

It seems obvious to us that the determination that a learning problem exists can be made with relative ease. To have to reduce attempts to understand and to explain the complicated interrelated processes that result in learning failure to a single cause is the result of blind faith in the medical disease model. The major justification for determining cause is to determine whether or not extra help is available and who will pay for it.

American education has for many years been concerned with what to do with the "difficult 25 percent." We go through fad and fashion in conceptualizations as to the nature of this problem and what to do about it. With legislation requiring an appropriate education in as normal a setting as possible for children with handicaps—handicaps that for the most part are the result of social system labeling by the schools—we have come full circle. We have now created a new category of handicapped children with learning disability. This handicap is inferred or made out to be due to rather specific biomedical causes. The learning failure of large numbers of students whose difficulties cannot be justified on these arbitrary tenuous grounds are ignored.

Since P.L. 94-142 funds are used exclusively for children diagnosed as handicapped, there is every reason to increase the number of students diagnosed as handicapped. As previously noted, federal funds come from a range of programs resulting from different laws (each with its own regulations) passed to satisfy or appease different special interest groups. Labeling children, however, to the whims of lawmakers is no way to ensure their appropriate education.

In most handicapping conditions, the labeled child is the victim of stereotyping, altered expectations, prejudice, mythologizing, fears, and the like. By insisting on viewing certain problems in learning as a handicap or a disability, we are requiring children to risk disability to gain service. As a handicap though, learning disability at present seems to occupy a rather special status among the various handicapping conditions. Further, it seems that the children with learning problems that do not qualify as handicapped may be even more at risk. They are entitled to special education services and are likely to be viewed as just plain slow, lazy, indifferent, or troublesome. They have no saving grace.

Learning Disability - Special Status

In addition to receiving special help through special education and reducing the likelihood of being viewed negatively because of unexplained poor performance, there are other advantages associated with the learning disability status. Learning disability is less perjorative than emotionally disturbed or mentally retarded. Because he or she is learning disabled, there is less likelihood of blaming him or her for poor performance. The child is seen as not having control over the poor performance. Furthermore, the teacher is entitled to special help and not held solely responsible for the child's poor performance.

Learning disability seems to occupy a unique status among handicapping conditions. In addition to being seen more positively, it is believed that, with appropriate help, the child with a learning disability more than likely will be able to achieve in such a manner as to move into more traditional middle class roles and occupations. Even though unsuccessful in achieving this goal, this child will have avoided the stigma of mental or

emotional impairment and their associated risk to self-esteem and self acceptance. Further, in retrospect, low grades in school can be readily explained.

In this sense, learning disability can be seen more as placing the child in the ranks of those who are ill rather than those who are "handicapped." Gliedman and Roth (1980) related Talcott Parsons' conceptualization of the sick role to disability. When an individual falls sick, that individual is excused from usual role obligations so that he can get well as soon as possible. The person is defined as powerless in one respect, being unable to fulfill his or her role and redefined as powerful in another more narrow respect, being capable of influencing to a certain extent the speed with which he or she recovers. To be handicapped, according to Gliedman and Roth, is to be assigned a peculiarly destructive variant of the sick role. One is not merely powerless because one is sick; one is doubly powerless because one cannot be expected to master the role obligations of the healthy, able-bodied individual. The sick able-bodied suceeds at getting well, but because the handicapped person's deficit is not yet susceptible to cure, the handicapped person fails to assert a similar mastery over his ailment.

In this sense, the child labeled learning disabled is more ill than handicapped. He or she is thought to be able to learn with appropriate help to compensate for or to overcome the difficulty. Accommodations can be made for differences in style of learning and other unique and specific interventions can be provided. With the expectation of success through hard work and appropriate instruction, learning disability is much closer to illness than other disabilities which are not presently susceptible to cure.

What it comes down to is that one is better off if one can't help whatever is wrong and others are convinced that one is doing all one can to get better. We are very hard on those we think can help it and who have willfully created their own circumstances. Public attitudes toward obese persons give ample testimony to this generalization. Yet, in another sense and from the point of view of personal change and control of one's destiny, it is disastrous to adopt the point of view that one's circumstances are due to conditions that one cannot help. Is the ultimate distinction between regular and special education based on whether or not one can help performing poorly? Is special education for those poor souls who can't help it? Is being able to help it the fundamental criterion that distinguishes "handicapped" from all others, us from them? Or is selective blaming and the need to blame somehow interwoven in subtle ways. Both "blaming" and "not helping it" fasten our concerns on deficits. If the mass of our regular educational effort is for those students relatively able to achieve mastery, then it seems desirable to make special efforts and provide special education for those who need help regardless of whether or not they can help it and without resorting to blaming.

We have previously observed that handicap sometimes is used to mean a condition within a person and sometimes to mean experiencing an obstacle to achievement of a specific goal, and that most often the intended meaning is not specified. Also in reference to a specific person, handicap is sometimes used in the context of the medical model to refer to individual pathology and sometimes in the context of social system labeling to refer to a special status that he or she occupies as a result of a process. This process results in judgement by others that the individual has a legitimate excuse for being unable to exercise mastery over any important aspect of his or her social life. A person so viewed is a member of a class of persons not recognized by one's society or culture as being normal or as a natural part of humanity. It has historic association with begging and helplessness and is usually because of some physical or mental characteristic that commands attention because of behavior or appearance.

To add to the confusion, handicap is often used interchangeably with disability. Disability may be thought of as a deprivation of ability in physical or mental functioning, and therefore less socially or culturally determined than handicap (Mathey and Trippe, 1981). A disabling condition is one that interferes with functioning, and to be disabled calls for adaptation and adjustments. It would then seem to follow that handicap more precisely is primarily associated with the social labeling model and disability with the individual pathology model.

Educational terminology and legislation has used the term handicap almost exclusively. If we assume the intention to be that of experiencing handicap rather than individual deviance based on biomedical assessments, then to be handicapped in school means that the child has a limitation that interferes with successful school performance. Thus poor listening, reading, spelling, writing, or arithmetical skills can be very handicapping in school. But it is equally handicapping to anyone regardless of inferred cause. Anyone in this culture, for example, who does not read is seriously limited or handicapped in a wide range of endeavors. But, reading is a skill and as such is differently distributed among persons. There is no **single** "cause" or underlying pathology that results in someone doing poorly just as there is no **one** "cause" for superior performance. Any one person's performance is the result of a constellation of interdependent genetic constitutional and experiential events. Schools operated for many years with this orientation. Because reading is so important to successful school performance, tutorial, remedial, and other reading services were made available to help improve the reading performance of children who did not do well.

Inability to drive a car sufficiently well to obtain a license or avoid accidents can be very handicapping but there is no one "cause" for this lack of skill. Because a person experiences being handicapped as a result of the inconvenience of having to make other arrangements for transportation does not make the person "driving handicapped" (i.e., a member of a stigmatized group of persons labeled by others as being less than human). Back to learning disability; the inability to perform adequately in some or all basic school skill areas can be very handicapping in school and even later. However, this is quite different than being regarded by others as less than human. And to the extent that it does, it seems only logical and humane to change the social system labeling practice.

Summary

Rudolph Dreikurs (1971) suggested that nobody in the world gets more attention both at home and at

school than the child who isn't reading. He went on to say that contemporary research has as its main goal to provide teachers with justification for their inability to influence and teach children who refuse to learn and cooperate and thereby add to the child's problem rather than help it. Such concepts as dyslexia, cerebral dysfunction, and perceptual problems are highly overrated as causes, but they do serve to justify the failure of teachers with an ever-growing number of reluctant learners. For Dreikurs, the failure is rooted in a lack of a sense of belonging and cooperation. Failure to learn is a consequence of pursuing faculty, mistaken goals to re-establish one's sense of belonging.

The educational system readily embraces the medical model to explain student failures, but stops there. In medicine, however, there is considerable interest in studying illnesses that occur as a consequence of medical treatment or interventions. There is precious little in educational literature that parallels this study of iatrogenic illnesses in medicine. Such research would examine sources of pupil failure as a consequence of educational interventions. Such study might be called didactogenic.

In the preface to her wonderful account of teaching six young children with hearing impairment, Frances Pockman Hawkins (1969) dared ask questions along these lines. Her account deserves extensive quoting:

> About twenty-five years ago in our dining room I had a discussion with a friend, Dr. Harry Gordon, who was then working with premature babies — premies as they were called in our medical school's department of pediatrics. He was telling me of the high incidence of blindness among babies being saved in incubators. In my lay ignorance and audacity, I asked whether perhaps the same percentage would have been blind before, had they been saved. I remember his thoughtful answer: 'No, Frances, we are doing it to them; we are doing something, the hospital is doing it.'
>
> I remember also the initial profound excitement and shock those words caused in my thirty-five-year old mind. The excitement I attribute to the realization that I was being spoken to from a frontier. I already knew my informant as a top pediatrician, scientist, friend, and I felt the surety of his response reflected knowledge and work to be trusted. I still feel the strength that such men and women in teams around the world can give all of us — all who search.
>
> As some of you will remember and others will have read, this particular mystery — blindness in premature babies or retrolental fibroplasia — was cracked not long after this episode.
>
> -and-
>
> Faced with the failure of children in our schools, their failure to learn well along the track which school has paved for them, where are the school doctors (not from the outside) who will say, with such informed and persistent conviction, 'it is something we are doing to them, our schools are doing to them?' Instead of seeing a child's failure as a response to our doing, to our failure, it becomes a 'learning disability', a 'behavior problem' and we are exonerated.
>
> Very much of what children need for their learning must come directly and indirectly from adults. As oxygen to the lungs, it must be readied for them and transmitted to them. Faced with failure in the process, we respond too easily by increasing the intensity of the efforts which have already failed, and in doing so we may block the very channels through which children can gain knowledge and understanding.
>
> High oxygen pressure attacks the delicate lung tissues of the premature and so decreases the surface area through which it can be taken into the bloodstream. And so, in many of our schools. The input we offer is needed, yet not assimilated. What we offer with one intent, but unanalyzed in its total meaning, has signaled another meaning: Don't use your reason, just memorize and pass a test which will not ask you to think.
>
> I should not be understood as opposing incubators for prematures, or 'methods' for teaching of the young. In every ongoing work, even in the care and education of children, there is a need for elements of mechanization and routine. But these are always a danger. They cannot be substitutes for learning to observe, for interpreting feedback, for bringing our own reason to bear upon the challenge of how to educate outside the home."

It is important to recognize that learning disability has emerged as a result of a number of forces operating within a particular culture climate at a time when other related developments were unfolding. Schools were recoiling from the impact of Sputnik and its increased demands for pupil performance. The middle-class orientation of schools was being challenged by racial and ethnic minorities, the Great Society was mounting war on poverty, schools were in a period of rapid expansion, school children became more difficult to manage, their parents confronting rather than cooperative. Special education for mental retardation and emotional distubance did not remove all of the problem children from the classes and some children, who in an earlier day might have been classified as retarded could no longer be so labeled. Add to this scenario the awareness that a small percentage of otherwise socially and academically competent students, students of influential parents, were failing to thrive in one or more of the basic school skills. Learning disability was an attractive alternative. And yet they learned quite well as evidenced by the fact that they are considered otherwise competent. It could be that they don't learn through the usual school procedures having to rely on other avenues and alternative procedures for gaining and processing skills and knowledge. Because their requirements demand attention through alternative routes, it was easier to invoke the disease model and through special education nurture them without ever questioning conventional, traditional practices.

By calling this type of child handicapped (learning disabled), it articulates that he or she has a handicap in achieving success in school. He or she, however, is not a member of that group of children so deviant as to be considered not normal or less than human. Since we all at times experience handicap related to some purpose or desire, we are all handicapped. If, however, we are all handicapped, the designation is not very helpful and, in fact, is meaningless. Handicap in another sense then is best seen as social system labeling by the schools and not a biomedical determined condition of physical or mental pathology.

The Rehabilitation Act Amendments of 1974 redefined a "handicapped individual" as any person who 1) has a physical or mental impairment which substantially limits one or more of such person's major life activities, 2) has a record of such an impairment, or 3) is regarded as having such an impairment. Our view is

that schools cannot continue to create handicap at the same time that we have a national commitment to social policy aimed at reducing and eliminating handicap as well as handicapism.

References

Bowe, Frank. *Handicapping America: Barriers to Disabled People*. New York: Harper and Row, 1978.

Dreikurs, Rudolf; Grunwald, Bernice; and Pepper, Floy. *Maintaining Sanity in the Classroom: Illustrated Teaching Techniques*. New York: Harper and Row, 1971.

Dunn, Lloyd M., "Special Education for the Mildly Retarded - Is Much of it Justifiable?" *Exceptional Children*, 35 (1968), pp 5-22.

Gliedman, John and Roth, William. *The Unexpected Minority -Handicapped Children In America*. New York: Harcourt, Brace, Jovanovich, 1980.

Guskin, S.L. and Spicker, H.H. "Educational Research in Mental Retardation". In N. Ellis (Ed.), *International Review of Research in Mental Retardation*, Vol. 3, New York: Academic Press, 1968.

Hawkins, Frances Pockman. *The Logic of Action - Young Children at Work*. New York: Pantheon Books, 1969.

McCarthy, James and McCarthy, Jean. *Learning Disabilities*. Boston: Allyn and Bacon, 1969.

Mathey, John P., "The Effects of an Inservice Training Program for Regular Classroom Teachers on Their Attitudes Toward Handicapped Children". Doctoral Dissertation, The University of Michigan, 1977.

Mathey, John P., and Trippe, Matthew. "Language Labels and Terms: Special Educators and the Problem of Handicapism". Unpublished manuscript, 1981.

Mercer, Jane R., *System of Multicultural Pluralisic Assessment*. Technical Manual. New York: The Psychological Corporation, 1979.

Pellatier, Kenneth R. *Holistic Medicine From Stress to Optimum Health*. New York: Delacourt Press/Seymour Lawrence, 1979.

Rhodes, William C. and Gibbons, Spencer. "Community Programming for the Behaviorally Deviant Child" in Quay, Herbert C. and Werry, John S. *Psychopathalogical Disorders of Childhood*. pp. 348-387 New York: John Wiley and Sons, 1972.

Rie, Herbert E. and Rie, Ellen D. *Handbook of Minimal Dysfunctions: A Critical View*. New York: John Wiley and Sons, 1980.

Sarason, Seymour; "Mainstreaming: Dilemmas, Opposition, Opportunities" in Reynolds, Maynard *Futures of Education for Exceptional Students: Emerging Structures*. National Support Systems Project, University of Minnesota, 1978.

Somatics Magazine - Journal of Bodily Arts and Sciences, Vol. 2 Number 4, Novato, California, 1980.

Szasz, Thomas R. "The Myth of Mental Illness", *American Psychologist*, Vol. 15, January, 1960.

Watzlawick, Paul. *How Real is Real, Confusion, Disinformation, Communication*, New York: Ramdon House, 1977.

Research-Based Knowledge and Professional Practices in Special Education for Emotionally Disturbed Students

by K. Charlie Lakin

K. Charlie Lakin is a research scientist in the Department of Psychoeducational Studies at the University of Minnesota. He is presently engaged in research on residential and community services for developmentally disabled people for the Health Care Financing Administration and works with the National Support Systems Project of the Office of Special Education's Dean's Grant program.

Generally the mark of a profession is the existence of standards and practices that are generally accepted by its practitioners, systematically taught to those entering the profession, and constantly under scrutiny and revision to better serve the profession's clients. In the final analysis, the justification for a profession's social acceptability is minimally that its clients are better served in matters related to the designated scope of that profession than they would be by "nonprofessional" (untrained, unlicensed, uncertified, etc.) persons.

In recent years, education, like most other professions (or semiprofessions as some call education), has seen considerable growth in practitioner specialization. Even within a specialization like special education, most states regulate the issuance of seven, eight, or more additional licenses. One of these licences invariably includes endorsement to teach emotionally disturbed/behaviorally disordered. The logic of creating greater numbers of specializations (subprofessions or sub-semiprofessions?) within a general area of practice, derives from an assumption that specific practices are clearly indicated in working effectively with certain types of problems or with certain types of clients. Too often left unsaid, but equally important, is the assumption that these practices are known and that their performance by members of the profession can reasonably be assured.

Knowledge about those professional practices that are most effective in resolving the problems of special education students derive from two principal sources: clinical (and general life) experience and "scientific" research (i.e., research which satisfies both common sense or the rudimentary rules of behavioral science). This chapter focuses on the latter.

The observations in this chapter about the condition of the research base of special education for emotionally disturbed/behaviorally disordered students derive from a very modest examination of a very narrow topic. The topic is how subjects are selected and described in published reports of research on emotionally disturbed or behaviorally disordered children. While the criteria used for the selection of subjects in research may not seem of crucial "practical importance," it must be pointed out that it is the method of selecting subjects of research that truly determines the topic of that research. For example, if one is doing research on horses by studying as a group every animal in the horse barn (including dogs, cats, a sick goat, two mice, and the farmer himself), little definitive knowledge about horses will be gained. Put simply, the method of selecting "horses" was inadequate.

If there is to be a research-based, client-centered justification for the rather specialized endeavor of categorical education for behaviorally disordered students, two conditions must be met. There must be: 1) evidence that there are unique qualities among members of that group and 2) demonstrably effective treatment practices that correspond to those qualities. This paper will ignore other possible justifications for categorical education of behaviorally disordered students (e.g., a systemic justification which suggests that a crucially important benefit of educational programs for behaviorally disordered students is that they reduce considerably the disruption of the regular education program). Instead this chapter focuses on the extent to which a research base has been created which justifies categorical identification and treatment of students as behaviorally disordered (emotionally disturbed, etc.).

Purpose/Method of Review

This chapter discusses research on research in the area of childhood behavior disorders. The emphasis of this examination was not on what specifically was "discovered", but on the methods by which the researchers approached the selection and description of the sample of children with whom the study was conducted. In doing this, the 16 professional journals which appear to be most frequently referred to in texts explaining what teachers should know and be able to do in working with emotionally disturbed/behaviorally disordered children and youth were examined. These may be classified into three "types": "special education journals," "behavioral psychology journals," and general "psychology journals."

Issues of the most frequently cited journals in these three categories published in a ten-year period up to

1978 were screened for research reports meeting the following criteria:

1) Reports discussed more than one subject.
2) Subjects were in a school setting or of school age.
3) Subjects were characterized as having social behavior sufficiently abnormal to be of concern to an adult referring or treatment agent.
4) The primary emphasis of the article was **not** on parent characteristics.
5) Subjects were **not** considered "autistic" or "child schizophrenics."
6) Research did **not** concern the treatment of specific phobias.
7) Research did **not** refer to delinquency without further describing the subjects as having persistent emotional and/or behavioral problems, so that single acts of delinquency would not be equated with psychopathology.

The number of research reports meeting criteria in the article identification process included: 29 articles from special education journals, 84 articles from psychology journals, and 63 articles from behavioral psychology journals. An arbitrary decision was made to randomly sample 25 percent or 21 articles from the psychology journal pool and equal numbers from each of the other two clusters.

Primary Labels

In the studies reviewed, fifteen different primary labels were attached to the subjects of the research. "Primary label" refers to the terminology most frequently used by the author(s) to subsume all subjects of the research (excluding the words, children, students, and subjects). The primary labels found employed, in the order of frequency are shown below:

Primary Label	Frequency
emotionally disturbed	24
disruptive	8
behaviorally disordered	5
behavior problem	5
delinquent/offender	4
aggressive	3
predelinquent	3
conduct problem	2
maladapting	2
noncompliant	2
behaviorally disabled	1
behaviorally disturbed	1
moderately disturbed	1
emotionally handicapped	1
conduct disordered	1

Table 1

List of Journals Reviewed*

Special Education	Psychology	Behavioral
American Journal of Orthopsychiatry (3)	Child Development (1)	Behavior Modification (2)
Behavioral Disorders (0)**	Journal of Abnormal Child Psychology (3)	Behavior Research and Therapy (4)
Exceptional Children (10)	Journal of Clinical Psychology (2)	Behavior Therapy (6)
Journal of Learning Disabilities (1)	Journal of Consulting and Clinical Psychology (9)	Journal of Applied Behavior Analysis (9)
Journal of Special Education (1)	Journal of Genetic Psychology (2)	
Psychology in the Schools (6)	Psychological Reports (4)	
21	21	21

*Number of articles selected from each journal appears in parenthesis

**Included were articles from Behavioral Disorders in the population of articles. However, when randomly sampled, none were selected.

Primary Labels and the Semantics of Psychological Ideology

The three journal types were found to differ considerably in the kinds of primary labels applied to the subjects of research reported in them. While a high degree of similarity was seen among special education and psychology journals in the applying of generic labels such as emotionally disturbed or behaviorally disordered to subjects, those articles in journals reflecting the "behavioral" perspective tended to apply primary labels descriptive of more narrowly defined behaviors of interest (e.g., disruptive, aggressive, noncompliant) far more frequently. This is not to say, however, that increasing precision has been employed in the designation of subjects in research reported in behavioral psychology journals. It simply means that the subjects about which the author is reporting are included within a more highly specific terminology. "Disruptive," for example, seems more narrowly defined than "emotionally disturbed." If, however, as is the case in a study by Barrish et al. (1969), an entire regular education classroom of fourth graders is considered "disruptive," for all the apparent specificity of the term, one may question how adequately the individual subjects have been described by the term.

Operational Definitions

Primary labels are not, however, particularly important in the ultimate designation of the sample studied. It is the operational definition that serves 1) to determine how individual subjects have been included in a study, 2) to describe those persons in the study's sample, and 3) to differentiate the persons a study is "about" from those it is not about.

In a review of 63 studies representing the body of research-based knowledge on the treatment of behavior disordered students, only 4 methods of operationally defined primary labels (selecting subjects) were identifiable. In terms of their frequency of use, they were the inclusion of subjects as representative of the primary label on the basis of:

1) being in a **setting** or program for children designated by the primary label (25)
2) being **nominated or referred** to the study as children representing the primary label with no additional definitional or diagnostic criteria applied (25)
3) being **rated** by one or more nonclinical persons on characteristics or symptoms with the primary label based on those rated characteristics (8)
4) being **clinically judged** as representing particular psychological symptomology or being grouped along these dimensions, or being referred as being representative of the primary label with specific diagnostic criteria applied to validate the labels (5).

Remarkably, then, over 80 percent of the studies reviewed selected subjects by presence in a setting (remember the horse in the barn?) or by soliciting and accepting nominations of subjects without any attempt to substantiate, quantify, or qualify the cases of those nominations. Little wonder that "clinical and experiential knowledge" provides the primary bases for professional decisions and practices in this field.

In addition to the gross problems in subject selection and description already noted are others which affect the eventual practical "usability" of this body of research. Among these are: 1) about half the studies reported subjects ages in ranges of four or more years, and almost none conducted analyses of results by age; 2) little interest was shown for sex as an important behavioral variables; 3) fewer than 20 percent of the studies reported the I.Q.'s of subjects despite the consistent strength of I.Q. measures to predict performance of research subjects; 4) only one in seven studies reported the academic ability of subjects despite the fact that the vast majority of the studies involved school settings; 5) fewer than 20 percent of the studies reported the socioeconomic class of subjects; and 6) fewer than 10 percent of the 63 studies provided research results broken down according to individual subjects. Many more specifics could be given about subject selection and description practices, but the point has already been made.

Personal Observations

If two major conclusions can be drawn from this modest study of studies, they would be 1) that special educators (or anyone else for that matter) ought to be very humble about making implicit or explicit claims of expertise about the nature and appropriate treatment of childhood behavior disorders; and 2) that when you get right down to it, without significant reconceptualization of the methods and rededication to the purpose of research efforts the real subject of this research will probably continue to be the various theories about children's behavior disorders rather than any group of children currently or potentially identified as manifesting them. While these conclusions may be perceived as negative, there is no particular reason to present them as such. Certainly humility is far superior to arrogance, particularly among people operating from very incomplete knowledge. Second, there is no logical reason why practitioners should not be identified by their favored theory and training rather than client group designation, in this case emotionally disturbed or behaviorally disordered students. Such identification could be made clear by theory or method identifying occupational titles such as school behavior modifier, Dystar remedial reading teacher, school psychotherapist, and so forth. These would all be clearly more empirically justifiable than categorical special education, although for a number of historical and political reasons, almost none of which make much sense, special education is unlikely to go in such a direction. This brings us back to the recurring theme of this paper, which is: if one seeks to justify or evaluate current professional practice in the area of treating the behavior disorders of school age children from published literature, there is a virtually insurmountable problem. Researchers simply do not often select and/or describe their subjects in ways that allow one to meaningfully evaluate the extent to which programs are effective for behaviorally disordered students in general or for students with specific types of disorders, concentrating instead on documenting the efficacy of their favored theory. The magnitude of this problem becomes readily apparent to anyone who would try to organize systematically what research has previously

been done with behavior disordered children. As Balow, Rubin, and Rosen noted in their extensive review of literature relating pre- and peri-natal complications to later behavior disorders:

> "The problems of definition and measurement, while they appear first to be mainly 'technical' psychometric problems, upon examination become challenges to much of the current thinking in the field of child behavior" (1977, p. 84).

Given the lack of meaningful descriptions of those children with whom research is conducted, summaries of that research tend to become little more than annotated bibliographies with "scholarly" transition phrases. Only through abundant faith, considerable wishful thinking, and a ready willingness to leap chasms of ignorance with bold inferences can anyone claim that much is being learned about those children and youth for whom, or in the name of whose diagnostic category, thousands of special education programs have been founded. Contemporary research has led to considerable elaboration and proliferation of techniques within the various psychological perspectives, but in terms of knowledge about the client group there has been little progress indeed.

Consider the language used. The descriptive labels used in referring to the subjects of this research are almost exclusively determined by our theoretical perspective. For example, in studies published in behavioral psychology journals one may find the same primary label, "disruptive," applied to children and youth ranging from residents of a state hospital whose disruptions are reported to include "fighting, swearing, and throwing objects" to some kindergarten children whose presenting problem is that they were talking and not staying on their mats during rest period. Similar examples are available from research governed by other theoretical perspectives.

Consider that in approximatley 40 percent of the research on childhood behavior disorders, subjects are included by being in a setting or program where all children were assumed merely by their presence to fit the descriptive terminology employed by a researcher; and that in another 40 percent subjects are included solely on the basis of being nominated by someone as representing whatever category of problem behavior a researcher wished to examine. In none of these cases are the subjects a sample in any probabilistic sense. The problems of this sort of subject inclusion are readily apparent when one looks carefully at what kind of a picture of a study's subjects can be gained from these dominant research practices.

Consider first those studies including subjects solely on the basis of their being in a setting where students are reported as emotionally disturbed, behaviorally disordered, maladaptive, and so forth. The problem here is simply that the reader who would like to picture the students with whom this research was conducted can only revert to a personal mental image of what kind of students are found in such settings. As far as the research report is concerned, behaviorally disordered students are defined as those students who are in settings for behaviorally disordered students. The circularity of such a description might be more tolerable if there was any evidence that the characteristics of children or youth placed in programs for emotionally disturbed or behaviorally disordered students were more or less constant within and across settings. However, the fact is that they are not. Solid evidence of this was provided by Browne (1975) in a study of differences among students in various types of educational settings for emotionally disturbed students in Massachusetts. In Browne's study, systematic and statistically significant differences were found in such crucial variables as I.Q., academic achievement, socioeconomic status, behavior ratings, and clinical diagnosis of students in different programs.

Some writers attempt, by presenting lists of collective problems or misbehaviors of the subjects, to refine inclusion by setting. For example, in one study, the subjects' "collective misbehavior" was reported to include "fighting, truancy, disobedience, sexual promiscuity, thievery, temper tantrums, and specific infractions of school rules." While at first glance this may seem to help picture the subjects, if one were to make a similar list of the collective misbehavior of Iowa's special education teachers on any given Friday night, the problem in equating such a list with adequate subject description would be readily apparent.

Consider next the 40 percent of the studies in which subjects were included on the basis of being nominated or referred as representing a particular problem or problem behavior. The most blatant problem with this form of subject selection is that it is often the nature of the environment and the solicitations of the researcher, more than the intensity or chronicity of the problem behavior, which determines the referred subjects. The extremes of this tendency were shown in the two studies of students referred as disruptive. Both groups were indeed disruptive in someone's eyes: one group apparently was disruptive enough to be sent to a state mental hospital. The other group was disruptive enough that the teacher was willing to participate in a behavior modification program to keep them quietly on their mats during rest period.

Not only does this imprecision in describing students cause the primary literature to communicate considerably less than need be the case, it spills over into reviews of that same literature. One of the studies examined in this review was one by Barrish, Saunders, and Wolf (1969). In this study, an entire class of fourth graders is described as disruptive. A group contingency program is established, but two students who have previously "been referred to the principal on a number of occasions for disruptive behavior" were dropped from the program because their continued disruptiveness was judged to unfairly penalize the other children. In short, with these two students the program failed. However, in five reviews of literature on "methods of" teaching children with disordered behavior in which this study is referred to, in only one did the authors mention that this program had totally failed with the most disruptive of the students. Obviously, better descriptions of subjects will not improve the general lack of specificity unless those using the research care about the accurateness of what they communicate.

What then is the present state of research related to the task of providing special services for children and youth with adjustment problems? Generally, it would seem that there is consistent evidence that random

attempts to work with such children have shown success over the short term when success is measured as group effects. However, if one is interested in more specific notions of what types of programs are most effective with what types of students, there is very little that can be said. Notions of pupil characterstics-treatment interactions such as that outlined by Lyndal Rich in the March 1980 issue of *Iowa Perspective* are interesting conjecture but lack empirical substantiation. The reason for this is, as has been noted, that researchers have been interested almost exclusively in validating techniques; to borrow a notion of philosopher Suzanne Langer (1969), they are interested in, "doing the whole science at once." Researchers must improve on the specificity of treatment efforts according to the characteristics of those widely varying individuals who populate programs for behaviorally disordered students if this field is eventually to justify its existence on grounds other than its offering a place for students wanted nowhere else.

In only 20 percent of the studies reviewed were subjects included in the study or considered as specific subgroups within the study based on any type of assessment of subject characteristics by the researcher prior to including an individual in a study sample. Whether this is the case because it's simply inconvenient to do so, because researchers assume a homogeneity of subjects despite irrefutable evidence to the contrary, or because they do not consider it relevant to their philosophy of treatment, cannot be said with surety. It can be said, however, that there is considerable atheoretical research to suggest that reliable means of collecting information about important individual characteristics are available to researchers in the form of the various behavior rating scales that have been developed in the past 20 years. They are not flashy and unfortunately will seldom appeal to those who wish to probe the psychiatric depths of a subject's personality or to those who will accept only what they can count. To others, they seem to offer some hope that present procedures can be improved upon considerably without starting from scratch.

The most frequently used rating scales are those which ask a rater, usually a parent, teacher, and/or clinician, to specify the degree to which words or phrases describing traditionally accepted symptoms of childhood and adolescent psychopathology (disturbing behaviors) are present in the young person being rated. The subjects' ratings are then compared to clusters of symptoms already identified as more or less independent syndromes or problems identified through factor analysis of the ratings of a standardizing sample. The logic of their use stems from the fact that people who see children on a daily basis can make pretty accurate assessments of the frequency and intensity of that behavior. The utility of their use is that they assess students on a wide range of noteworthy behaviors. The best known of these scales is probably *The Behavior Problem Checklist* (Peterson, 1961; Quay, Morse and Cutler, 1966) although several others exist.

Behavior rating scales have an impressive within-setting reliability, are accommodating to environmental variations in behavior, involve relatively little cost and time to administer, have the potential for eventual standardization, and do not violate common sense. Beyond this they encourage consideration of research outcomes on a basis more refined than the total group. The present tendency to do group research with no specific attention directed to individuals or subgroups within the larger group has totally supported the domination of research about theories as opposed to about children. Any means that can begin to interject sharper focus is highly needed if we are to justify our categorical identifications let alone develop more effective child treatment practices. Reasonably reliable means for accomplishing this exist, and if anyone were interested these could easily be further improved by greater objectification and standardization.

But more careful descriptions and analysis of the effects of programs on individuals or subgroups is only a beginning to the kind of subject description that will be required if this field hopes to develop an adequate understanding of its clients and its effects on their lives. Researchers in other areas of education and psychology have demonstrated frequently and convincingly that there are a number of factors which are highly related to behavior. Among these variables are age, sex, mental age, academic ability, and socioeconomic status. Despite these strong indications that these are variables about which researchers must be concerned if they are to do client-centered versus theory-centered research, and despite the fact that subjects of present research are often very different in regard to these factors, seldom did the authors of the research reviewed examine and/or report the effects of these variables in their particular studies. Neither was variability of behavior across settings ever used as an independent variable, even though it has appeal in distinguishing between abnormal behavior deriving from an abnormal mental state ("emotional disturbance") as opposed to abnormal behavior which is learned ("a behavior disorder"). Why? Probably because these terms have become markers of philosophy but treated otherwise as meaningless. However, there is good reason to suspect that they could have considerable meaning should anyone care to explore them carefully.

Few procedures have been shown to be as important in presenting a meaningful picture of subjects of research as control groups and follow-up procedures. Given the well-documented transcience of problem behaviors in childhood, the thoughtful use of these procedures is imperative to the researcher who wishes to accommodate this known fact. Most behavioral and emotional problems of childhood are resolved without treatment by certified educational or clinical personnel. This does not demean professional efforts. Most infections are cured without the intervention of medical personnel. This does not mean that medical personnel, or their medicines, are not useful in treating infections. It does mean, however, that if one wants to know if they are more useful than any alternative treatment, including nontreatment, one must use a comparable control group. Given the powerful effects of time, concerned others, and change of environment, the behavioral researcher must add to this requirement a follow-up of these groups over time.

These two techniques: the use of comparable control groups and follow-up procedures, were used in only one of the 63 studies examined for this chapter. That single study, by Kent and O'Leary (1976), showed temporary success of a behavior modification program,

but no difference between treated and nontreated "conduct problem" groups over a follow-up period which included environmental change. It is a study which may interject some measure of realism about the total impact of intervention efforts. Replication of this type of effort, examining more carefully individual subjects will be welcomed by those who are willing to openly challenge the strength of their present beliefs in pursuit of improved professional practices.

If control groups and follow-up procedures seem so promising in developing a better understanding of what is being or might be accomplished in this field, why are they so seldom used? One reason, of course, is that they make research more difficult since twice the number of subjects and settings are required. Another factor, no doubt, is that they require much more time than the other research found in the general literature. At least in terms of getting published, an important factor in the lives of most academics, less of an effort has been adequate. Also, quite likely, these procedures may be a little frightening to researchers with vested interests in the status quo, since it is considerably easier to show positive effects when there is the natural course of maturation working in their favor, as well as the reassurance that any attempt to solve a problem usually brings some measure of success. Finally, some may assume that it is wrong to deprive a child or youth of the treatment that he/she needs in the name of improved research methodologies. Haywood (1977) has responded to this argument in some comments he made regarding similar problems in the study of mental retardation:

> Translated literally, that means that since we are in possession of revealed truth, we must not deprive anyone of its benefits. This (siren) song is deadliest since its assumption is that knowledge that is worthwhile comes about by revelation, rather than by systematic inquiry. (p. 314)

Based on the rather limited evidence now on hand, researchers should feel fairly safe in proceeding with control groups followed over a period of time. When untreated groups are not possible alternatively treated groups are an acceptable option. But given the present sophistication of treatment procedures there is simply very little evidence that the denial of general programs (special education) for general categories (emotionally disturbed) or more specific treatments (behavioral techniques) for more specifically designated categories (conduct disorders) will in the long run be to the detriment of control subjects (Calhoun and Elliott, 1977; Kent and O'Leary, 1976; Vacc, 1972).

Sixteen years ago, Carl Fenichel (1965) noted that "As yet there is little solid evidence based on statistical studies or controlled research to measure the value of any special education program." That statement, at least in regard to children with disordered behavior, remains pretty much true today. To change that, there must be more people willing to put their faith on the line, but there is no shortage of appropriate research techniques to test the soundness of that faith. Our intentions are generally good, and it is hope that they are not paving many roads to hell, but what is being accomplished may be less or more or very different from what one might have reason to conjecture at this point in the infancy of our special education.

Practitioners can always use more techniques in working with children in this field. It must be remembered, however, that there are already more techniques than anyone can possibly read about, let alone master. The task must become eventually to sort through what has been amassed to see if any of these techniques has consistent utility in affecting change in children, and which children, and what kind of change. And to do this counting and publicizing failures is just as important as the recording of successes. Nothing in this field has been less "scientific" than the tendency to prefer statistically significant findings over well-designed studies in making decision about what will be published.

Special education for children and youth identified as emotionally disturbed is a federally mandated, hundreds-of-million dollar policy, the general effects of which have been remarkably poorly evaluated. While one hopes that the efforts mandated through P.L. 94-142 have a positive effect on the lives of children referred to as behaviorally disordered, there is precious little evidence one way or the other. Generally, the justification for the growth of this profession has derived from that law rather than from evidence that what is done in this field is generally beneficial to its clients. Unfortunately, this legal justification for existance has lulled concerns about the logical or ethical justifiability of our practices. For example, recently a national "needs assessment" of programs for emotionally disturbed students was conducted. A lot of money was invested to determine how many more programs for emotionally disturbed students are needed. From one perspective it might be useful to have some idea whether programs for emotionally disturbed students tend to help or hinder their eventual adjustment (and at what cost) before talking about how many are "needed." The horse appears to be behind the cart and there is little evidence that it is gaining ground.

I have faith that as a field, education for children with behavior disorders will survive and grow from hard-nosed research on the effectiveness of its programs for children with behavior disorders. But I emphasize that word faith. It is hoped that, in the interim, as we advocate more programs and policies for this troubled group of children and youth, we will keep in mind that we do so on belief, not evidence. We must be especially wary that we don't advocate for ourselves in their name.

Finally, I feel strongly that our branch of special education needs to open itself to scrutiny by nontraditional means. Although William James, preeminent psychologist of his day, warned us 80 years ago that "to know psychology. . .is no guarantee that we shall be good teachers," special education has adopted the research methods of psychology as its own. If we knew that we knew all the right questions to ask about our practice, this might not be limiting. But do we? We simply need to theorize less and collect more data. Let us encourage others simply to watch us and describe us and what we do, and let us watch and describe ourselves. This is no less science than what we are doing now.

Researchers must humbly proceed, improving traditional research practices, and making much more room, in fact encouraging new conceptualizations of what constitutes research on children and youth with behavior disorders. They need to look carefully at new

or alternative models working with children with serious adjustment problems and to describe those extremes of service from which we may all derive inspiration and rededication. Above all else, researchers must remember that the services offered to children and youth in the future will be determined by the way that those in their socially privileged role define their responsibility today. The prospect should weigh more heavily than that of maintaining any particular psychosocial ideology.

Finally, with some trepidation, I'll try to respond to a question about "the implications of all this for practitioners who are turning to the literature for ideas." In doing so, my comments are based on my own experience as a teacher. My comments may reflect only my own idiosyncracies.

Teachers live in a world which is very different from that of the professional scholar/researcher. It is easy for researchers to overvalue what is and what should be the impact of their work on the professional practices of teachers. Teachers are as likely (actually more likely) to be influenced by clinical intuitions and experiential knowledge as they are research findings. Most often their new ideas come from inspiration, word of mouth, or the "nonscientific" literature that teachers write for other teachers. Teachers are utilitarian, and research, like ideas from their peers, must satisfy the scrutiny of a practical eye. If teachers are to use research, that research must serve their commitment to providing educationally sound and enjoyable academic and social experiences to individual students. But teachers do and will continue to use research that is of practical value. Certainly in mainstreaming mildly mentally retarded students, teachers and teacher organizations, based on research evidence and practical experience, have been the prime movers of a radical change in educational practices in just a few years.

It seems unlikely, however, that practicing teachers will invest themselves very much in the kinds of research on childhood behavior disorders reviewed for this chapter. One reason for this is that for the most part, informal systems exist among teachers which provide information which is as useful and often more useful to them. The professional interchange in which one teacher tells another that a particular activity, technique, set of materials, etc. "worked pretty well in my class" differs little from the bulk of the published research on children's behavior disorders in which the same basic message is conveyed through statistics, charts, and tables of group data. And research on the "characteristics" of children with behavior disorders is generally of even less utility.

Second, the published research on children and youth with behavior disorders tends to cover only a narrow part of what teachers must accomplish in the classroom. If my goals as a teacher are representative, teachers tend to look to academic achievement as the most sound and realistic measure of a student's (and their own) success. Yet with the exception of what might be considered "creating a favorable environment for learning" — without question a vitally important factor in learning — not much research on students with behavior disorders even touches issues of academic progress.

Third, research as presently written up is cumbersome and not at all amenable to the needs of teachers. Reviews of past research and highly technical and pedantic descriptions of research procedures and outcomes jammed with weighty statistics are not only of little use to teachers, they are seldom justified in the first place, since few of the "samples" in our research are randomly drawn from any population of children manifesting the primary label. Teachers want and feel a true need for new ideas, but the bottom line is whether they appear appropriate to the teacher's goals, problems, and need to provide stimulation and variation in the lessons they prepare for their students and whether they seem like they'll probably be successful. These are not considerations based on categorical classfications of students; they are universal to teachers and, therefore, such needs are often better fulfilled by publications designed to provide teachers with creative ideas and to give them a forum for sharing ideas.

When one carefully scratches the veneer of our often very presumptuous statistical analyses, it becomes rather clear that the exclusive clubs of trained academics who sit on the editorial boards of professional journals have done little in shaping the professional knowledge base that would have been above the ability of most special education practitioners. If only by default it seems long overdue that practitioners be given much greater opportunity to participate in decisions about what appears in professional journals. In professional journals related to applied fields, like special education, where clinical and experiential knowledge will always be as strong a determinant of practice as is formal research, a forum for informal research ("things that did and did not work") really ought to exist beside the formal studies. From this review, the gap in epistomological purity between the "formal" and "informal" research is narrow indeed.

I suppose there are other "implications" of this study of how we do research for teachers, but honestly I think the implications are really for researchers. It is unreasonable to expect teachers to read much of the "professional" literature simply out of filiality to a professional group. It is unrealistic to expect that teachers will read much of the professional literature unless it is more useful to them in what they do and what they advocate than other literature available. The ball is really in the court of the researchers. For too long we have been willing to exist in total diagreement about everything except that there ought to be more programs for emotionally disturbed/behaviorally disordered students. Direction is badly needed.

References

Balow, B.; Rubin, R.H.; and Rosen, M.J.
"Complications of Pregnancy and Birth as Contributors to Personality Development and Aberrant Behavior" (Interim Report #26). Minneapolis: Department of Psychoeducational Studies, University of Minnesota, 1977.

Barrish, H.H.; Saunder, M.; and Wolf, M. "Good Behavior Game: Effects of Individual Contingencies for Group Consequences on Disruptive Behavior in a Classroom." *Journal of Applied Behavior Analysis*, 1969, 2, 119-124.

Browne, T.H. "A Study of Selected Psychological, Sociological and Academic Factors among Emotionally Disturbed Children in Three Treatment Programs." Unpublished doctoral dissertation, Boston College, 1975.

Calhoun, G., and Elliott, R.N. "Self-Concept and Academic Achievement of Educable Retarded and Emotionally Disturbed Pupils." *Exceptional Children*, 1977, 43, 379-380.

Fenichel, C. "Psycho-educational Approaches for Seriously Disturbed Children in the Classroom." In P. Knoblock (Ed.), *Approaches in Education Emotionally Disturbed Children*. Syracuse, NY: Division of Special Education and Rehabilitation, Syracuse University, 1965.

Haywood, H.C. "The Ethics of Doing Research—and of Not Doing It." *American Journal of Mental Deficiency*, 1977, 81, 311-317.

James, W. *Talks to Teachers on Psychology: And to Students on Some of Life's Ideals*. New York: Henry Holt & Co., 1901.

Kent, N.K., and O'Leary, K.D. "A Controlled Evaluation of Behavior Modification with Conduct Problem Children." *Journal of Consulting and Clinical Psychology*, 1976, 44, 586-596.

Peterson, D.R. "Behavior Problems in Middle Childhood." *Journal of Consulting Psychology*, 1961, 25, 205-209.

Quay, H.C.; Morse, W.C.; and Cutler, R.L. "Personality Patterns of Pupils in Special Classes for the Emotionally Disturbed." *Exceptional Children*, 1966, 32, 297-301.

Rich, H.L. "An Eclective Approach to the Education of Emotionally Disturbed Children." *Iowa Perspective*, 1980 (March), 8-12.

Vacc, N.A. "Long-Term Effects of Special Class Intervention for Emotionally Disturbed Children." *Exceptional Children*, 1972, 39, 15-22.

To Punish or to Heal: The Issues and Dynamics of Educating Emotionally Disturbed Children

by Virginia Rezmierski and Marla Frudden Rubinstein

Virginia Rezmierski is currently director of a National Model Project for school-aged Handicapped Students called The Intervention By Prescription Project (IBP) and an assistant professor of education at the University of Michigan-Dearborn. As a former teacher of emotionally disturbed students, consultant to teachers, and special education administrator in the schools, her teaching at the University is focused on providing regular education teacher candidates with a wide range of information regarding students with special needs. As director of the IBP Project, she is actively attempting to provide information to educators and clinicians regarding the critical need for developmental information in diagnosis and the usefulness of a problem-solving model to restore clinical rigor to the consideration of school and child-centered problems.

Marla Frudden Rubinstein is a doctoral student in educational psychology at the University of Michigan. Formerly a school psychologist, she is currently the Project Assistant for the Intervention By Prescription (IBP) Project, a Handicapped Children's Model Project. The Project is aimed at developing and implementing an alternative to the psychometric model of assessment in the schools which is based on developmental principles and ecological information. She is also a therapist and is doing research on family interaction patterns through the Family Therapy Project at the University of Michigan.

Over the past twenty years, the focus of programs for educating emotionally disturbed (E.D.) students has changed several times. One of the most persistently difficult problems for special educators, one which has contributed to changes in focus, has been that of defining what "emotional disturbance" means. With confusion as to *who* should be included in the population of students called "disturbed," it follows that there would be continual controversy regarding the procedures to be used to identify this population and the objectives of the educational programs for this group. Indeed, this has been the case. Discussions about definition and appropriate educational programs have appeared frequently in the literature. Few authors, however, have attempted to describe the ways in which the dynamics of individual and system responses to this population of students have added yet another significant element to the confusion in this field.

In this chapter we will explore the issues in educating emotionaly disturbed students, examine the dynamic responses of individuals and systems, and discuss some of the ways in which they enter into the decision-making process in schools. Finally, we will briefly review two models which have the potential, if purposefully used, for decreasing the confusion around the issues of definition and programming and the negative effects of individual and system responses. In the way that a comprehensive road map assists a traveler in reaching a destination by illuminating options without depriving him of decisions regarding route and schedule, these models have the potential for assisting educators in maintaining their focus on the problem-solving task with E. D. students, without so often becoming derailed by changes of focus and objective.

Definition and Educational Philosophy

Before one can understand why the education of E. D. students has seemed to persist in a state of confusion, it is necessary to first separate issues of definition from those of educational philosophy. Definitional issues have not been easy to agree upon for any of the areas of special educational service for any of the handicaps. However, defining emotional disturbance is especially problematic because it is the product of how broadly society, and education in particular, defines its responsibilities to children. How emotional disturbance is defined also reflects the orientation a group of persons holds regarding the meaning of behaviors.

There are basically three orientations to child behavior which are reflected in the literature — ways in which child behaviors are assigned meaning. From the first orientation, behaviors are viewed as indices of the individual's state of health on a continuum which ranges from mental sickness to mental health. This "sick-well," or medical, orientation places the focus of the problem most often within the child. It also leads one to believe that a statement might be designed which establishes definitive cut-off points, against which children's behavioral patterns might be judged and decisions of group inclusion or exclusion might be made. Students may thus be judged to be either disturbed or not from their behavioral response patterns.

In the second orientation, behaviors are viewed as signs of the nature of interactions between two persons. This "interactive," or ecological, orientation leads one to examine the environments within which a child functions for the meaning of the behaviors which are observed. Rather than behaviors having meaning relative to the sickness or health of the child, they are

meaningless without knowledge of their interactive target and purpose. For those at the extreme of this orientation, emotional disturbance — mental illness — is a myth without existence unless the system is also viewed as dysfunctive. Many in the field of special education now approach the problem of emotional disturbance in the schools from a variation or combination of these first two orientations.

In the third orientation behaviors are examined as they compare to, or deviate from, those behaviors of the norm for a given age group within the same context. This "normative -nonnormative," or epidemiological, approach leads one to constantly adjust the parameters of a definition according to the normative behaviors of a given population. What I may choose to define as abnormal behavior in one population may not be defined as such in another population. Through this orientation one begins to reach a better understanding of the normative changes which take place in behavioral patterns as the individual develops through various ages and stages.

In the same way that definition of disturbance is a function of one's orientation to and understanding of behavior, the orientation a group of persons holds towards child behavior is an outgrowth of the basic educational philosophy which is subscribed to, that is, how that group defines its educational responsibility to children. Over the past twenty years in education there has been a continuous vacillation between two major philosophies regarding this responsiblity. This has been a major contributor to the state of flux and confusion in educating emotionally disturbed students.

One of the philosophies promotes the view that the responsibility of school personnel is to facilitate and foster growth and learning within students. This is done not only by creating environments which are conducive to learning, but also by providing the type of support which any given student may need to be able to respond to the learning experience. For students who have emotional or behavioral problems, this may require the provision of special management programs to assist in managing their impulses and behavior or therapeutic services within the school to assist them in understanding school-related conflicts.

The second major educational philosophy fosters the view that a teacher's responsibility is to teach. This means that a teacher should provide the experiences and the information which are needed for learning to take place. Any student who is either unable or unwilling to learn in such a setting must be placed in another setting or be brought into compliance. Such children have been identified and subsequently placed outside of the regular educational stream. Much of the time in the past two decades, educators have subscribed to this second, rather exclusionary philosophy for children with serious emotional and behavior problems. The cognitive functioning of students has consistantly been emphasized over the other domains as if the others were of lesser significance to the learning task. Morse and Ravlin (1979) commented on this phenomena:

> The fact that children come to school with functionally inseparable melanges of affective, cognitive, and motor domains is ignored by those who continue to labor under the illusion that schools deal with only "disembodied intellect." (p. 336)

As education in general has swung between these two philosophies, programs for E. D. students, even decisions regarding the existence of such programs, have correspondingly reflected these changes in focus. We have struggled with the question of what "is" and "isn't" the proper role of education with this population. Often several different notions have existed within a school system regarding the responsibility of schools to children and how to define, understand, and respond to student behaviors.

Differences in orientation toward student behaviors — the pull between punishing and healing, between exclusion and inclusion — frequently are found within and between members of a board of education, administration, community, and teaching staff. Under these conditions, program goals become confused. Frequently instead of reaching a consensus as to philosophy and approach, we have simply incorporated a wide variety of viewpoints and as many different approaches to programs for this group. With such fragmentation, energy has become diverted from student-related problem solving and decisions as to how best to serve a given child, to activities to defend programs, to clarify goals, to create yet another approach, to resist changes, to detail benefits or lack of benefits in a given approach, and so on. A type of layering occurs as personnel gradually lose sight of student-related issues and become increasingly absorbed in issues related to clarification of responsbility, goals, and definitions. A historical review of educational programs for emotionally disturbed students shows evidence of this shifting between two educational philosophies and also the confusion of issues and diversion of energies which seems to have resulted.

Historical Overview of Educational Programs

In the early 1950's, special education classes were found in institutions and hospitals. Students whose emotional and behavioral needs were beyond that which was expected in public schools were placed outside of the school setting. A specialized education was provided within the hospital or institution. It was basically remedial in nature, providing an opportunity for the students to keep up or to catch up with the skills of their age-mates. Educators and therapists had different views as to the significance of education in the treatment of the disturbed students. For some, education served to occupy the child's time between therapy appointments, and nothing more. For others, the restorative powers of a carefully prescribed curriculum and support program were felt to play a much more central role in the overall treatment plan. During this period, from the point of view of general educators however, the behaviors and attitudes of these students were such that they needed to be served in a setting other than public school. Responsiblity for their education was often willingly transferred to medical programs or ignored. Because the purpose and responsiblity of education to this population was unclear, special educators spent much of their time demonstrating the value of their programs and discussing and defining their role on the treatment team.

In the late 1950's and early 1960's, special education classes began to develop in the public schools for E. D. students. The students in these programs were often suspended from the "regular classrooms," labeled "emotionally disturbed," and placed in these special classes. Teachers were expected to manage the student's deviant behaviors, teach academic subjects, and provide sufficient emotional support for the students to become involved in learning. In many schools, teams of clinicians were available to assist the teacher in providing the needed therapeutic support. During this period, teachers often found themselves divided between directives from two different sources of authority — the team of clinicians who prescribed therapeutic handling and the administrator of the school who set the parameters of permissable school behaviors.

One teacher described his struggle with these directives as the "chameleon caper." In the halls and other general school areas, he and the students in the special education class were expected to behave by one set of standards. For instance, those open expressions of anger to the teacher or other adults which were acceptable, indeed encouraged, in the special education room were not acceptable in the school hall or playground. During this period the first real struggles to define the school's responsibility to this population of students could be seen. Though still excluded from the general population of students, these students were now within public school buildings and were taught by teachers who were part of the public school system. Educators asked what they should be expected to do with this group.

By the late 1960's and early 1970's, programs began to shift away from the emphasis on emotional therapeutic support toward behavioral and academic management. Remediation of academic skills as well as behavioral patterns become the focus. Helping the student to be a more successful student and more teachable became a theme. Students whose performance or school behaviors were beyond the norm continued to be removed from the regular setting and placed in special education programs; however, the efficacy of removing them from regular education began to be questioned. The controversy between the two previously described educational philosophies and their translations into programs for E. D. students began to rage. What was the role of the schools? Should school personnel provide therapy or education? Where did the school's responsibility for a problem end? Which were the parent's responsibilities? These and other questions were being asked and debated by school personnel.

Another question, perhaps residue from the previous period, was also heavily discussed. Who should be the source of authority and administration over these programs for disturbed students; the school administrator in whose building the program was located, or the clinician who coordinated the treatment team? One can see that the most basic issue which needed resolution was that of philosophy and subsequent goals for these programs. However, energy became diverted into struggles for authority, defense, blame assigning, and other such issues, as systems struggled with trying to establish the parameters of their responsibility.

From the mid-1970's to the present, the controversy has continued. Legislation mandating services to children with special needs has made it more difficult for systems to simply exclude students who are not complying with behavioral standards. Appropriate placement and educational programs must be determined and are the designated responsibility of the schools.

From the ealry 1950's to the present, the responsibility for defining this population has shifted from the clinicians to the educators. Historically, medical personnel defined whether or not a student was emotionally disturbed — a reflection of the sick-well orientation towards child behaviors. However, as programming efforts shifted from the hospital and residential settings to the community and school settings, so did the responsibility for defining who should be included in such programs.

School personnel began by adopting the medical definition of disturbance. As we have expanded services to those children who fit this definition, as well as to others who school personnel feel are experiencing emotional and behavioral problems, it has become increasingly clear that a definition for this population has not yet been satisfactorily established. Perhaps as Kauffman (1980) conjectures, we have now gone beyond educators to the legislators for our definitions.

> The field may now be entering an era during which the primary responsibility of advocacy for exceptional children shifts from psychologists and educators to bureaucrats and attorneys. Perhaps the new legislation represents a shift from the motivation of moral imperative to the motivation of legal precedent, from reliance on clinical judgement to reliance on the rules and regulations that define technical compliance. (p. 523).

After twenty years of programs, we are still struggling with the same issues. Who should we serve? In what setting should they be served? What should be the purpose of our special services? For what period should such services be available?

These problems continue to plague this area of education because the basic educational philosophy regarding our responsiblity to this population has been unstable and unclear. Morse and Ravlin (1979) suggest that "the unclear role of the schools vis a vis the affective domain remains an unresolved issue in psychoeducation" (p. 336). To attempt the definitional task prior to establishing the philosophy and scope of educational responsibility results in a confusion of issues. Under such circumstances, personnel experience cognitive dissonance and confusion. Energy is lost and diverted from the problem solving which is needed to succeed in helping this population of students.

There is evidence of at least three basic orientations to behavior — ways of assigning meaning — and at least two basic philosophies underlying educational programs for E.D. students. Hence, it is not difficult to see how many possible combinations of these elements might enter into the design and goal setting of such special programs. Perhaps in viewing our struggles with issues of definition and program design from this context of fluctuating parameters, we can better understand the existence of confusion and changing focus in this area. There is no right or wrong answer to

the issue of definition. Educators must come to grips with this reality.

> The reality that a mild variation from developmental norms can sometimes be a handicap and sometimes not a handicap is an ambiguity educators must learn to tolerate. It will then be possible to find ways to describe the mildly handicapped learner without resorting to either - or reasoning. (Meyan and Moran, 1979, p. 530).

Educational courage is called for—courage to resist trying to destroy ambiguity simply by creating categories and artificial parameters rather than addressing basic philosophy of service. They need courage to move ahead, directing energies towards creating maximal learning environments for all children instead of becoming absorbed by exclusion-inclusion decisions. Educators need to seek the greatest amount of agreement among those people within a system, select the orientation towards behaviors which they can most support, define the educational philosophy which they think should dictate their programs, and then design programs which clearly and consistantly reflect that philosophy and that orientation. They should actively resist the influence and pressure of those nonsystem groups, or even groups within the system, which add layers of bureaucracy or fragments of other philosophies upon their system without first addressing the agreed-upon position of that system, which respond first to economics or politics and last to educational philosophy. Programs should not simply be added because a group of people insists, or because the approach is new or different. To the degree that people are unclear as to what orientation and philosophy is being reflected in their programs with this population of students, there will be more confusion and less energy to focus upon student problems. Cognitive dissonance and defensive energies will persist and we will continue to struggle trying to define who is and who is not disturbed.

> The fact is that there is no clear, unambiguous definition of emotional disturbance. It's time we faced the fact that disordered behavior is whatever we choose to make it; it is not an objective thing that exists outside our arbitrary sociocultural rules any more than mental retardation is. (Sarason and Doris, 1979, as quoted in Kaufman, 1980, p. 525).

The Dynamics of Individual and System Responses

It is not, unfortunately, the multiple and mixed educational philosophies alone which cause the shifts and uncertainty in focus of special education programs for E.D. students. More than in any other area, dynamics of individual and system responses to these students play an important role in determining the nature of programs and the focus of human energies. The nature of these students, their behaviors, the problems which they bring to the school environment, and those which they create within that environment cause adults to lose sight of the primary student needs and become caught up in a cycle of responses to the students and to multiple secondary issues.

Individual responses to these students cause tremendous loss of energy, as educators struggle with their own vacillating motivations to punish or to heal. This often results in a sense of confusion and failure. Energy is also lost as individuals attempt to deal with the responses of systems to this group. The system responses is primarily one of layering: policies and rules are set; guidelines for identification, management, and exclusion are created; and structures are designed. As individual educators, as well as parents, try to respond to the system dictates, these layers soon cause the original student problem to become lost, in the same way that a creeping fog gradually obscures the detail of the terrain.

A certain amount of layering phenomena seems to be present in system responses to all populations of students. Perhaps it is inherent in the nature of systems to respond first and to explore and understand second. It is our contention, however, that the layering of reactions and the resultant confusion around issues is magnified more in work with E.D. students than with any other population of students.

The basic dynamic which seems to be operating is that the human cognitive processes are overpowered by the affective processes. The phenomenon is referred to, in psychoanalytic terms, as "counter-transference." This dynamic seems to be the same for individuals as for systems. However, the complexity at the system level makes a separate examination of these responses more understandable.

Table 1 (page 25) may serve to illustrate the levels of this conflict and the resultant individual and system responses. It will be discussed in the following sections of this chapter.

The Energy Loss Phenomenon

The process which we are describing seems to happen in varying degrees for different individuals, and in different situations. It ranges from a simple confusion over the cause of a child's reaction to a situation or event and difficulty reconstructing the problem, to a near total blockage of reasoning by massive reactions and intense feelings. This struggle between affect and cognition, this dissonance and disequilibrium, seems to be more acute for adults working with disturbed students than for those working with other types of handicapped students. The reason for this seems to lie in the degree of ease with which the adult identifies the problem and is able to maintain psychological distance from it, understanding it but not becoming part of it.

Few educators would deny that education for students with learning disabilities has inherent in it some of the same dilemmas of how to define the disability and how and where to provide programs. However, learning disabilities, like many other handicapping conditions, can more easily be assigned a focal point, a locus. A teacher can more easily understand the problem as a "student problem." The problem does not exist primarily within the interaction between the adult and the child, as is the case so often with disturbed students. The teacher can identify the problem as, "the child cannot read," or "the child's visual memory is impaired." Once certain parameters are established, the adult can respond to the problem without becoming confused by his own responses. A course of action can be set; a focus can be determined; an academic program can be designed.

Table 1: Individual and System Responses to Dissonance			
	Level of Dissonance	**Individual Response**	**System Response**
Mild	Cognitive discomfort: conflict between expectations and reality	Energy towards: •clarification •understanding •correct answers •structuring	Energy towards: •adjusting focus—dealing with other issues •restructuring—creating, or assigning responsibilities •definition—creating guidelines, rituals
Moderate	Cognitive confusion, affect aroused: conflict between adult needs and student needs	Energy towards: •assigning blame •eliminating problem •self-doubt, reevaluation	Energy towards: •elaborate rule and ritual making •policies for evaluation, placement, and elimination
Severe	Massive affect aroused, cognition blocked: attack on values, self-image, physical self, standards	Energy towards: •denial •despair •avoidance •depression •aggression	Energy towards: •defining social responsibility between systems, e. g., education and mental health •policy and legislated exclusionary definitions

Likewise, if a student cannot hear many of the sounds of spoken language, wears a hearing aide, and/or speaks poorly with incomplete comprehension, a teacher can see the need for special assistance. The locus of the problem is clear and understandable. Certainly there may be technical questions which will need to be answered. Certainly, too, there are clear responsibilities which rest with the school—responsibilities to facilitate this youngster's learning. However, teachers need not feel conflict about whether or not they have caused the problem.

Recently a principal placed a frantic call for consultation. She stated that her skilled teacher of deaf and hearing impaired children required immediate assistance. As she described the situation, the teacher, though recognized as highly successful with deaf children, had become psychologically paralyzed by the emotional problems of students in her class. She was unable to manage the class, wanted students excluded, and found it difficult to come to school each day. For this teacher, and for many others, without the presence of emotional problems in the students, dissonance between teacher and child needs would not be a major problem. Those adult needs to nuture, direct, control, guide, and others which are the foundations for selecting teachers as a profession, would most probably be met without significant conflict. The human processes of affect and cognition might remain relatively balanced. Children with emotional problems cause these processes to fall out of balance, however.

A child who either cries and is persistantly fearful in a classroom, or one who consistantly breaks classroom rules and fights, creates situations where the needs of the teacher are often brought into conflict with his/her professional and adult role expectations. These behaviors are much more difficult to simply define as a problem which is the student's alone. They are interactive by nature and by design. They more easily rub against the needs of the teacher.

The struggle to respond to the needs of the student rather than being reactive to his/her behaviors is basically a normal struggle to maintain a balance between cognition and affect. If our own needs are so stimulated that they flood cognition, making it difficult or impossible to sort out and solve student problems, we are unable to teach, to support, to guide. This is not to say that cognition should always take precedence in our actions. Being human, and having needs of our own, it is doubtful that such a condition could exist. More importantly, our identification with students, with their joys and pains, is often the vehicle which delivers us to an understanding of and a relationship with them. In describing the importance of this identification process, Felleman (1973) wrote:

> The teacher must strike a balance in herself between the two extremes of identification. She must have a sensitivity and an empathy for the feelings of the child and a secure acceptance of the teacher's need for models. To strike this balance is the hallmark of fine teaching (p.5).

Conflict between expectations and reality is inevitable for those who work with emotionally disturbed students. To function from a position where affect constantly overpowers cognition however, is a neurotic and unproductive stance for an educator. It marks the loss of energies and an inability to successfully accomplish the reaching task. Morse (1980) suggests that:

> We must forego the normal expectations if we are to work with the disturbed. . . . One has to get one's satisfaction from knowing we are doing the right thing to help though the change may be too delayed to give us the desired feedback. . . .We need to understand when our normal expectation becomes a rescue fantasy which distorts the true condition (p. 9).

Felleman (1973) supports the need for healthy adults teaching students.

> It is ego-fortifying for the child to interact with adults who do not make irrational demands nor set up situations that only gratify their own neurotic needs (p. 10).

A closer look at the different levels of dissonnace and disequilibrium between affect and cognition may be helpful to teachers in avoiding these sources of energy loss. It may be helpful to supervisors in assisting teachers with their natural responses to emotionally disturbed and disturbing students.

Individual Response: Mild

At the mild level, dissonance is experienced as only a slight imbalance between cognition and affect. The adult experiences some discomfort as attempts are made to bring expectations and reality into line. Energies are focused on gaining clarification, on understanding, and on gaining "correct" answers to questions about why a student would react or behave in a particular, unexpected manner. There generally is a real desire to "get to the bottom" of an issue; to find out "where this kid is coming from." Children who are experiencing emotional problems, or who have not learned to manage impulses and consequently come into frequent conflicts within the school environment, frequently stimulate this level of response in teachers.

The child who, within the structure of the classroom, can take directions and work relatively well with frequent support, may become the "terror of the lunchroom" where structure is less obvious. The teenagers who are typical students, and who at home are generally responsible, may one day find a momentary thrill in partially dismantling a playground structure at the nearby elementary school. These are "normal" or perhaps mildly disturbed students who cause teachers to experience this level of mild dissonance. The adult is able to pause and reflect on what may be the student's reason or the need which led to the behavior, but there is confusion and discomfort at this dissonance between expectation and reality. There is difficulty in understanding the behavior, often because the adult is responding from his or her personal history with value judgements as to the appropriateness of the behavior.

Children in transition from one developmental stage to another frequently create this confusion in the adult as well. The four-year-old who has had a compliant, loving relationship with her mother may suddenly express her own wants and desires to her mother's dismay. The mother may wonder what happened to her sweet little girl, without recognizing this as normal four-year-old behavior. There is a discrepancy between the adult's expectation and the reality of four-year-olds. These unsettling moments are typical at every transition point in a child's maturation. It becomes particularly confusing when there is slippage back and forth between stages.

Slippage and vacillation between stages is particularly common at the junior high level and also for disturbed students. The mild level of dissonance is also very common in the adults who teach at the junior high schools. A junior high student may at one moment need and solicit adult attention and approval, only to scoff at it or perhaps blatantly reject it in the next. As students progress to new stages, new adult/student relationships are needed. Working out a new relationship requires that old rules be broken and replaced with new ones. Ties of dependency and open protection no longer work. In the school setting, a balance must be struck between the school taking responsibility for students' behavior and students being given a degree of flexibility to assume their own responsiblity.

It is not difficult to see how responses to this level of dissonance, the search for answers, the psychological struggles between expectations and real behaviors, if constantly engaged in without understanding being achieved, might lead to the loss of both time and energy. While productive responses might be made which would assist the student in evaluating, changing, or accepting his feelings and behaviors, the adult instead is involved in a struggle to put his or her own perceptions of the pieces in order. When teachers' expectations and responses are based more heavily upon their own needs than upon those of their students, a higher level of energy drain occurs.

Individual Response: Moderate

The moderate level of dissonance is characterized by conflict between the adult needs and the student needs. At this level there is cognitive confusion accompanied by arousal of affect within the adult. Energy is directed towards achieving clarification and understanding as before, however, the higher level of affect which is aroused causes teachers to pursue one of several possible forms of relief to the dissonance which they feel. Energy may be spent 1) assigning blame, 2) pursuing channels for eliminating the problem or even the student, 3) experiencing self-doubt and self-evaluation, or 4) participating in more active problem solving.

Returning to the previous example of those children who persistantly cried or broke classroom rules will assist us in seeing how these responses develop. When a child cries or is fearful in the classroom, refuses to talk, curses, or erupts in a burst of anger, teachers may wonder what role they have played in causing the problem, question their effectiveness, experience dismay over how the child could do that to them, or want to give up in despair. The threat that these reactions pose is that objectivity can be lost. Out of desire to nurture or to convey empathy, the teacher may become over-involved or over-protective, attempting to fight the child's battles for him. Or when reason fails, they may

respond in a punitive or rejective manner out of anger, disgust, or hurt. This "fight-or-flight" dilemma, these mixed motivations to punish or heal, presents a tremendous challenge to teachers' capacity to maintain self-control.

Various labels have been attached to this phenomenon of counter transference, "the stress and conflict cycle" (Long and Duffner, 1980), "helplessness rage" (Bloom, 1981), "struggles for distance" (Rezmierski, 1981), and "fear" (Pickhardt, 1978). At the heart of the problem is a desire to cope — to manage the conflict and somehow divorce oneself from it. These "distancing mechanisms" can be externalized, "fight," solutions such as assigning intent to the student behavior (e.g., "He did it on purpose to bug me"), or becoming a crusader for student rights. Internalized, "flight," responses take the form of self-blame (e.g., "If I were a better teacher this wouldn't happen to me") or martyrdom ("When the other teachers see what I have to put up with they will really be impressed").

Such responses as these — blaming, eliminating, and self-doubt — may be self-defeating because not only do they drain previous energy away from solving the student's problem, but they may also yield the opposite effects — they may exacerbate the problem. Affect is not being medicated by cognition in these instances. In fact, there is a disequilibrium between these two processes. Cognition needs an assist to overcome the affect which is aroused in these cases. Cognition often needs such an assist in work with emotionally disturbed students. The cycle of stress and conflict is described by Long and Duffner (1980) in an attempt to help teachers understand how these dynamics operate. Once teachers understand the cycles they become caught within, the way in which stressed students can create their feelings and at times their behaviors in those with whom they interact — Long feels they will be less prone to react to students' defensive and defeating behaviors and be in a better position to help students cope with their stress.

At the moderate level of dissonance, stress-conflict cycles are common between teachers and disturbed students. Such cycles typically begin with a stressful incident or event, from within the student, or from daily encounters. The stress of this event creates feelings in the student that may or may not be recognized or "owned." If the student somehow feels that his feelings are "bad" or unacceptable, then he will 1) deny these feelings, 2) project them onto others, or 3) reorganize them so they are acted out in disguised forms. A desirable goal for the teacher is to help students recognize and "own" their feelings so that they can learn to distinguish them from the resultant behavior (e.g., while it is "ok" to feel angry at a friend who has hurt your feelings, it may not be appropriate to retaliate by physically attacking him).

A student's behavior can trap adults as well as peers in the conflict cycle. This may ultimately culminate in a "power struggle." The teacher has to guard against reinforcing and perpetuating the student's inappropriate behavior by responding in a fashion similar to that of the student. For instance, an aggressive pupil can make others feel anxious and act in impulsive, irrational ways, whereas withdrawn pupils can get others to ignore them (Long, 1980). When it occurs, energies become increasingly devoted to "winning" rather than to solving the original problem. This stimulation and subsequent diversion of energies into struggles with the student and with our selves is characteristic of the moderate level of dissonance. When this diversion of energies becomes more severe and blocked, it is characteristic of level three — severe dissonance.

Individual Response: Severe

At this level, the reaction on the part of the adult to a set of student behaviors is so intense that there is an inability to think about the problem and particularly about the student's needs. The behaviors arouse such massive amounts of affect that cognition is blocked. In most typical adults, such severe dissonance occurs only after direct and serious attacks on the adult's values or standards, self-image, physical self, or sense of well-being. When adults reach this level of response, energy is devoted to denial, avoidance, defensiveness, or despair and depression. Gaining information about a problem is of little consequence at this level because the dissonance and imbalance between affect and cognition is such that regaining stability is the main goal; protective, defensive behaviors take precedence over logical processes. There are numerous incidents in work with E. D. students in which the adult may find himself at this level of responsiveness.

Those whose own history of development has not progressed far enough to be beyond the turmoils and reevaluations of adolescence may be thrown into this level of responsiveness frequently in working with disturbed adolescents. Such students will challenge adult beliefs, fairness, and concern and test the status of their group acceptance. Likewise, teachers whose history of development has left them particularly vulnerable will discover the uncanny ability of disturbed students to target their behaviors at that area of vulnerability, thus throwing the adult into frequent conflict as sensitivities are continually tested. If this conflict reaches severe levels and is consistantly present, the adult may begin to typically respond with behaviors which represent this third level of disequilibrium.

In a camp setting, a young teacher was assigned a group of disturbed pre-adolescent girls. Already concerned about managing the interactions of these girls and helping them to avoid destructive interpersonal conflicts, the teacher/counselor soon found herself confronted with group control problems. One of the girls, a very meek and shy teenager, had a history of being scapegoated by peers. Another group member, a very verbal and aggressive girl with leadership abilities soon focused group interactions directly upon the shy one, pointing out her inadequacies and goading her to respond. Several tries by the teacher to bring more empathy into the group and other efforts to terminate the behavior were unsuccessful. She began to be angry with the group leader, and overprotective of the shy girl. More attempts were made, equally unsuccessful, to regain group control. Finally, feeling a complete failure, and after two days of continuous loss of authority, the teacher dissolved into tears and asked to be relieved of her responsibilities with this group. She did not want to face or work with these girls any longer. In fact, she asked to leave the camp employment. The disequilibrium she

experienced overpowered her ability to solve the group problems, even individual problems; she needed to avoid the interactions completely.

Other incidents, such as unexplainable student suicides, seemingly senseless violent attacks on one student by another, destruction of school property, and many other events can cause adults to respond at this level also. As values are affronted by such realities, the dissonance is such that we find a withdrawal into despair or denial, a throwing up of hands, or a shrugging of shoulders to be our only ways of resolving such discrepancies. Because of the magnitude of the dissonance we experience, we choose not to "own" the feelings. We resolve, or at least diminish, the conflict by avoiding even contemplation of the matters which cause such arousal. These responses are consistant with what might be expected according to Festinger (1957). He states the two basic hypotheses of the theory of Cognitive Dissonance to be:

- The existence of dissonance, being psychologically uncomfortable, will motivate the person to try to reduce the dissonance and achieve consonance.
- When dissonance is present, in addition to trying to reduce it, the person will actively avoid situations and information which would likely increase the dissonance (p. 3).

In the preceeding sections, we described the three levels of individual responses to the dissonance which is often created in work with E.D. students. At each level, energy is drained and diverted into increasingly defensive maneuvers and attempts to reduce or avoid the discomfort. Systems also respond to these students in dynamic ways and with processes which represent varying levels of defensive energies.

The Layering Phenomenon

Understanding system responses to this population of students becomes very complicated because of a process which we have titled "the layering phenomenon." Each decision which is made within a system reverberates through different parts of that system. If a group establishes a policy to pursue one course of study with its students in science, for example, everyone who is in any way affected by that decision will have a response. The teacher who must teach the material will respond, perhaps needing additional information or training, perhaps with feelings of excitment or inadequacy, perhaps with strong professional disagreements, or with support for the content or methods. Likewise, the students, parents, community members, even the custodian of the building, may have a response to this decision. Each of these levels of response, and the subsequent reactions to them, causes a layer to be built. It is possible for system responses to become so layered that the original need which was the focus of a particular policy decision becomes obscured.

When many different parts of the system are caused to reverberate by a system decision, and when that decision causes dissonance of such magnitude within individuals that great quantities of energy are expended in reaction, the process and the decision itself may be counter-productive. The federal system response which produced P.L. 94-142 seems to be one such example of a policy which has many layers of clarification and response and has subsequently caused massive expenditure of energy in reactive rather than productive educational process. Many feel that the intent of that policy has become lost or, at the least, hopelessly obscured, a victim of the layering phenomenon. This phenomenon as it occurs within systems in response to emotionally disturbed students can best be seen by referring back to Table 1 (page 25) as we review system responses to various levels of dissonance caused by this population.

System Response: Mild

Systems respond to ambiguity and confusion by trying to create a sense of order. This seems to be the characteristic response to the mild level of dissonance caused by students who are disturbed or disturbing. The conflict at this level is discomfort between expectations and reality; systems are seen to readjust the focus of concern, deal with other issues, restructure or reassign, and define. One relatively common example will suffice to illustrate how systems respond at this level of mild dissonance to these emotional and behavioral problems.

In the elementary buildings of one school district, teachers reported that many students were having trouble behaving in the lunchroom, frequent injuries were occurring during the play period which followed lunch, and many students were having difficulty settling down in the classrooms upon returning from the playground. The lunch hour duration was 60 minutes (30 for eating and 30 for play). A unanimous decision was made by the district elementary principals to shorten the lunch hour to 30 minutes (15 for eating and 15 for play). The rationale to support this decision was that the lunch hour was too long, making the day too long for the children.

A decision to shorten the lunch hour eliminated the possibility of students going home for lunch, potentially shortened the school day, and affected teacher contracts and busing schedules. As a result, energy was quickly diverted from understanding and solving the behavioral problems of the students or dealing with the environments in which students were experiencing difficulties to substantiating the arguments needed to support the decision which was made. New and different sets of needs become obvious when principals were pressed to provide a rationale for the decision. Principals reported that they were unable to use the lunch hour to meet with staff because they were occupied handling behavioral problems, were too often put in the position of administering first aid instead of attending to their administrative duties, and felt tied to their buildings during these periods — were not free to leave to take care of other matters. Teachers began to expend energy substantiating the argument that if the student day were shortened, indeed the teacher's day would also need to be renegotiated. Parents began to expend energy establishing a rationale for why students should be allowed to go home for lunch.

Eventually, the unanimous elementary principal recommendation to shorten the student day lost momentum. Ironically, this occurred not because it did not address the actual student problem, but instead

because it was becoming too bureaucratically complicated. In this process, not only was there little energy left for considering the original student problem and for trying to understand its causes, but the original problem itself was indeed obscured. Questions such as, *why* were the students having behavioral problems in the lunchroom, *why* were they experiencing injuries on the playground, and *why* were they having difficulty settling in the classrooms, were not asked.

It is important to note in this example that the system's response to mild dissonance between expectations for school behavior and reality and its attempts to reduce ambiguity by structuring and refocusing issues, were essentially fruitless. Since they were not primarily founded upon an understanding of student needs, they may have exacerbated the origional problem. At the least, they confused the issue by layering other issues on top and by draining valuable professional energy away from the student problem. It is the degree of dissonance that is created for individuals which causes this reaction, not the degree of disturbance. Even severely disturbed students may create only mild dissonance for adults.

A fascinating twist has occurred in programs for emotionally disturbed students. This twist has to do with the fact that even though P.L. 94-142 specifies that mildly handicapped and underserved children constitute a priority in addition to severely emotionally disturbed children; this aspect of the law is often obscured in implementation efforts. Educational systems have accepted, without much dissonance, the responsibility of educating the severely emotionally disturbed students as long as they are separated from the mainstream of the educational process.

Two factors seem to be operating here, neither of which has anything to do with the ability of school personnel to serve this population of students within the school environment. The first is a function of the level of dissonance created by this population. From the educators' point of view, if one accepts the philosophy that all handicapped students are the responsibility of the schools, the obviousness of the handicap of severely emotionally disturbed, psychotic and autistic students makes it easier for adults to remain removed from the problem. Little dissonance is created within the adult since the problem can readily be seen to exist and to be located within the child.

On the other hand, the ambiguity which exists in trying to determine which of the more mildly handicapped to serve, and how, creates within the adult much more discomfort; it creates conflicts of orientation, philosophy, and process. Avoiding that issue not only makes sense from a fiscal point of view, but also as a way of decreasing dissonance. When allocation of funds for resources and support services is based on the number of children with categorical handicaps, then including the severely emotionally disturbed makes sense. The issues become not, whether we are equipped and qualified to serve or even manage this population of students, but instead, whether they are relatively comfortable and understandable recipients of service and whether we will receive credit for such service. It is our contention that it is the response of the systems to this population of students which has determined their service even more than the fiscal and definitional realities which are so often cited. As we explore responses to higher levels of dissonance this may become more obvious, particularly as we look at populations of emotionally disturbed students which cause severe levels of dissonance in systems. System responses change from attempts to define who and what types of problems will be eligible for service to the creation of rituals and guidelines — more rigid and structured procedures for reducing ambiguity — as the level of dissonance which this population creates increases to higher levels.

System Responses: Moderate

At the moderate level of dissonance, affect is aroused in adults by this population of students. This affect causes confusion of cognitive processes and as we have described previously, a vacillation between motivations to heal and to punish. Perhaps the example of lunchroom behavioral problems and the decision to shorten the lunch and play hour represents more than simply an attempt to structure the situation. It is our contention that this example may also represent the punitive reactions of adults to restrict the students and to eliminate the problem by exclusion rather than solution. In response to moderate levels of dissonance, systems seem to create elaborate rules and procedures. The system seems to go into action to protect itself from attack. Unable to resolve the ambiguity which surrounds definition for this population, and confused by professionals' shifting recommendations as to appropriate policies for dealing with this group, the system sets out to create its own parameters; it creates policies for evaluation, placement and/or exclusion.

Systems must retain a degree of order over their student population, and must do so within a limited financial budget. Too many disturbed students causing too great a level of discomfort for teaching personnel would be unsettling to the system. Likewise, too many students requiring too many special services would prove unsettling to the budget. Elaborate processes are undertaken to ensure that not too many, but enough, of the disturbed and disruptive students are identified to maintain stability within the system. In some systems, as much as one or even two years have been devoted to the creation of books of forms, guidelines, procedures, and policy statements in response to P.L. 94-142. The original need may have been to identify those students who need special service in order to benefit from the learning process. However, it becomes lost under layers of regulations and interpretations — protections for the system.

It is not difficult to see how this state of affairs comes about. For one thing, mildly or situationally handicapped students do not neatly "fit" catgorical labels. The risk of mislabeling is greater at the mild end of the continuum since it is more difficult to assess at what point deviation from the norm becomes a "handicap." Consequently the decision of whether or not to label a particular child becomes the issue of focus rather than his/her actual needs. In an attempt not to get caught up in debates about ethics and the harmful effects of labeling a child as handicapped, the administration may decide to assume a conservative posture. This decision is reinforced by a string of other

considerations. By not actively seeking out or initiating programs for mildly disturbed youngsters, the school system avoids the "threat of litigation by disgruntled parents, a crushing load of paper work, and administrative procedures of unthinkable proportions" (Kaufman, 1980, p. 525). Moreover, in the face of fiscal and political constraints, inflation, declining enrollment, and withdrawal of taxpayer support, schools cope by redefining the mandate and elect to serve first those most in need of special services — the most severely impaired. So systems deploy the energies of their personnel toward documentation, evaluation, and placement procedures. While these elaborate processes may protect the system from the ambiguity caused the vacillating educational philosophies, differing orientations towards student behavior, and shifting motivations within the individuals who work with this population of students, they also dissipate the energies of school personnel and draw them away from the very students they are hired to serve.

It is this moderate level of dissonance with the subsequent system and individual responses, and the interaction between the two, which is most obvious in the field today. Not only do the adults need to expend massive amounts of energy to keep their cognition and affect in equilibrium, to manage their own impulses in working with disturbed students, but they also become caught in responses to the layers of policies which are made by the system to control this group of students. This is a particularly difficult task for those who are in the role of psychologist, social worker, and teacher consultant. It is also difficult for school principals to the degree that they see their role including advocacy for students. These persons play dual roles, advocating for the child and for his needs, as well as representing the system and its policies.

The following, all too common, example may illustrate how this layering response occurs within a school system. John, a fifteen-year-old ninth grader who is unable to make many friends and is a slow average learner, finds that by missing school he accomplishes several things. He avoids the struggle with assignments; avoids confrontations with one teacher, Mrs. Jones; and also gains a degree of status with peers when he elaborates on the many activities he undertook during the day. His swaggering behavior within school, when he is there, causes Mrs. Jones to be particularly irritated because it draws attention away from the class lesson. She feels that because he is such a poor student he has little to "swagger" about. She informs the assistant principal that John is not coming to school and is disruptive when is there. The boy is informed, in front of peers, that school policy indicates that two more absences and he will lose credit for the course. This adds to John's stress within the learning situation. Further, five more absences in his classes will result in suspension. (**Suspension** as a policy to combat **absences** from school, taxes our comprehension. However, it is too often the common policy of schools. One must ask if it is meant to "combat absences" as to "combat the student.") The assistant principal suggests a referral be made to the school social worker or psychologist.

It is at this point that system policies and system reactions to these students cause real conflict for persons in helping positions. The psychologist may know that all that is needed in this situation is for someone to assist the teacher in better understanding the dynamics of the student's behaviors, and avoiding the conflict cycle into which she is being drawn. However, once a referral is made, certain system procedures must be followed. In most systems, the psychologist may not begin gathering information regarding this situation until adequate paper work has been accomplished. Since the psychologist in many systems is required to produce a quota of evaluations per week, he/she may not be willing to see this student without doing a formal evaluation. Standardized testing data must be gathered and a report written. Permission must be obtained from the student's parent before such evaluation may be undertaken. A team must meet. Mrs. Jones will continue to wait for information. Chances are that this student will not be found to fit the categorical label of "emotionally disturbed." This begins another chain of reactions.

The results are that if the student does not fit the category for special service: 1) Mrs. Jones will not receive assistance in staying out of the conflict cycle with this student; 2) the student will not receive help in learning more productive ways of meeting his adolescent social needs; and 3) the system will continue to respond with policies which exacerbate many student problems. The policies will continue to tie the hands of the helping professionals by restricting them from using their informal diagnostic and intervention skills—skills which may very well have resolved this conflict. Is it fortunate or unfortunate that this student may eventually become severe enough to receive support services?

The system response to moderate levels of dissonance, in this case, the responses caused within the individuals by John's behavior and by his affronts to such important regulations as attendance, ultimately were unproductive. Psychologists, social workers, teacher consultants, and special education teachers dramatically feel this struggle between being a representative of the system, participating in its layering and rituals, and being an advocate for the needs of students. They report feeling that the diagnostic and intervention skills which they were trained to exercise are being compromised by the system's defensive rituals which focus upon compliance with procedures and guidelines, instead of pursuing the best programs for the students who have special emotional and behavioral needs. They also feel frustrated by policies which the systems establish because of the severe levels of dissonance caused by the behaviors of some E. D. students. What is the response when the system is really threatened by severe conflict — by severe dissonance between expectations and reality?

System Responses: Severe

At the severe level of dissonance, the individual's response, aroused by massive affect, threat to self image, threat to values, and so on, is to reject, deny, refuse, or avoid dealing with those who cause such reactions. At the system level, the response is similar. Students whose behaviors seriously threaten the stability of the system, who commit violent acts, persist in vandalisms, and/or lead peers into similarly disruptive behaviors, are cast

out of the system. Likewise, those who threaten the physical well-being of the adults in control, and those who only verbally threaten such violent behaviors, are cast out.

The energy of the system seems to be devoted to creating policies which limit the school's responsibility to this population of students. One wonders if it is a reflection of many systems' responses at the severe level of dissonance which caused the definition of emotionally disturbed within the regulations of P.L. 94-142 to read: "(ii) The term includes children who are schizophrenic or autistic. The term does not include children who are socially maladjusted, unless it is determined that they are seriously emotionally disturbed" (Education of Handicapped Children, Federal Register, Section 121a.5 1977). Certainly it was not coincidence. Indeed, it is this population, the "socially maladjusted," which pose the greatest real threat to the stability and control of the school system. The behaviors of these students cause the most severe dissonance between our beliefs, value, feelings of safety, responses as adults, and our cognitive process. And it is this group which we most eagerly define out of our responsibilities, even if they do have emotional problems. The seeming senselessness of many of their behaviors befuddles understanding. It is much more difficult to consider "healing" this population. Even trying to understand their needs takes an effort for most adults because we are too often more eager to "punish" this group. They seem to reject our best efforts by rejecting, threatening, and even destroying school property and routine. They seem to surround themselves with social conflict, perpetually placing adults in the uncomfortable role of arbitrator, disciplinarian, or judge. One question continues to arise: should schools have to accept responsibility for these socially maladjusted students who seem so desperately to want to divorce themselves from the process of schooling?

Layering occurs as different systems interact and try to determine where the responsibility for this group of students lies. Is it the responsibility of the schools, the mental health system, or the juvenile court system, to educate these students? If these deliberations, these layers, have led us to effective programs for this population of students, we might feel that they have been worthwhile. To the contrary, it appears that an increasing number of problems are identified within the school system. Many professionals find it impossible to understand social maladjustment without associating it with some degree of emotional disturbance. It is unproductive and unrealistic to simply avoid this group or put most of our energy into finding an alternate source willing to provide for their educational support. It is our contention that by not understanding these dynamics of individual and system responses to the E.D. students who cause such severe dissonance, we lose valuable energy to the conflict cycle and to coping with the layering phenomenon.

Summary and Recommendations

In this chapter we have attempted to identify some of the issues which underlie the process of educating emotionally disturbed students in school systems. The importance of determining a single orientation to behavior and establishing a basic educational philosophy were discussed. There is little hope that issues of definition and programming for E.D. students can be established without agreement in these basic areas.

We have also described the dynamics of working with this population. Discussed were the ways in which these dynamics and the different level responses of individuals to these students cause energy to be diverted from solving student problems by efforts to control our own impulses and to ensure that our own human needs are met. Educators must have assistance in working with E.D. students, assistance with their own responses, and assistance in evaluating the appropriateness and usefulness of system responses in serving the students. Because affect is so readily aroused by this group of students, because cognition is so often overpowered in the process, educators need tools to assist their problem-solving efforts; they need assistance to avoid draining their energies and becoming lost in the layering phenomenon; they need help avoiding premature selections of interventions.

When dissonance is created at either the individual or system levels, there is usually a great need to alleviate it by taking some action. Unfortunately, the action is all too frequently *reactive* rather than *prescriptive*. More often than not, a solution is attempted before the problem has been adequately assessed. Consequently, the real problem can be missed, ignored, or blocked. Great quantities of energy and resources can be expended in efforts to carry out unproductive solutions. We have shown that when personal needs become intermingled with child and system needs, objectivity is obscured. To ensure that interventions are selected which are prescriptive rather than reactive, cognition must be active and not flooded by affect. It is our contention that problem-solving models may provide the needed cognitive assistance for individuals who work with E. D. students.

There are two models which we have found to be particularly helpful to eductors in their work with E.D. students. These models are not rituals which limit cognition by routinizing the diagnostic intervention process. Instead, they are models for problem solving; they guide decision making by helping to illuminate options. There is an important difference between models which typically promote answers, and those which promote questions. The first has the danger of limiting the amount of energy which goes into cognitive process by allowing the people who use it to become dependent upon the information which it produces or helps to produce. Examples of standardized instruments being used in this limited, concrete manner are all too common within schools. The second type of model — one which promotes questions — encourages, in fact demands, that personnel more actively consider the information which is available to them. Indeed, in order to use a problem-solving model such as those which are reviewed here requires that one actively think about the problem in order to answer the questions which are posed by the model. Such cognitive aides as these are particularly useful in work with E. D. students because they seem to help individuals maintain the equilibrium between cognition and affect; they help to decrease

dissonance and avoid the confusion of layers of secondary issues.

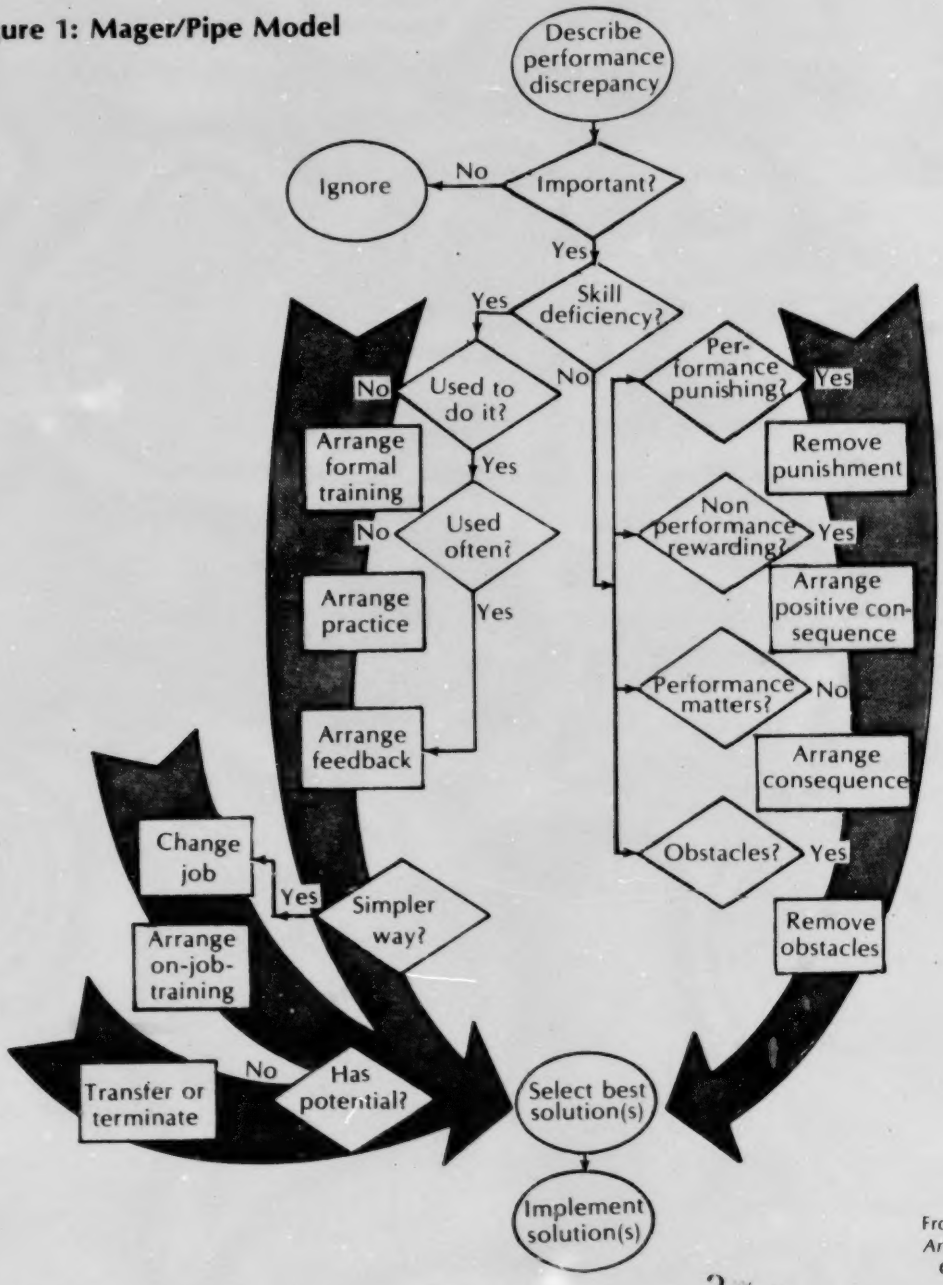
Following are descriptions of the model for Analyzing Performance Problems, designed by Mager and Pipe, and the Intervention by Prescription Model, created by Rezmierski, Rubinstein, and Shiffler. The ways in which these models assist individuals and systems to maintain their focus upon the needs of the student also will be discussed.

The Mager/Pipe Model

The Mager/Pipe model is a behaviorally-based model for determining the nature of performance discrepancies. Although it was originally developed for use in industry, it has application in education as well. By following a series of questions arranged in a flow-chart format, the user is guided in systematic consideration of possible causes for a performance discrepancy. For each cause a corresponding solution is offered (see Figure 1).

The first step in this problem-solving process is to **describe** the performance discrepancy. It is not uncommon for a teacher to feel overwhelmed by a situation or a particular child's behavior. Focusing on one issue or problem at a time is the first step toward managing frustration. Therefore it is important that teachers be able to describe precisely what it is that is upsetting them; what is "supposed" to be happening that is not.

Figure 1: Mager/Pipe Model



From Mager, R. F. and Pipe, P. *Analyzing Performance Problems Or 'You Really Oughta Wanna.'*

Next, the model calls for a decision as to whether or not the identified discrepancy is important enough to do anything about. Unfortunately, without such a model, this step is frequently overlooked in actual practice, and a lot of unnecessary time and energy is wasted on insignificant or misplaced remedies. At this step, teachers are forced to stop and consider whose problem it really is — perhaps their own values or expectations are in need of evaluation before the onus is placed on the child. Teachers need to ask why the discrepancy is important and what would happen if it were left alone. If it is not important, no further energy should be expended worrying about it; they should ignore this particular discrepancy and move on to one that is important.

With the nature of the problem having been described and its importance determined, the use of this model is in a position to start exploring possible **causes** for the performance discrepancy. The first question to consider is whether the observed discrepancy is due to a skill deficiency. If the teacher thinks that the child cannot perform the desired skill or behavior even if he "really had to," the questions on the left side of the flow-chart should be pursued. If it is subsequently discovered that the child never had the skill in question in his or her repertoire, the indication is to arrange formal training. However, if the child "used to do it," the investigator would need to know how often it was used. It could be that the child's skill in the area of concern is simply rusty and in need of a refresher or practice. On the other hand, if it is something that the child used frequently and it is still deficient, the solution may be to arrange better or more frequent feedback.

If it is determined that the performance discrepancy is not due to a skill deficiency, that the child could perform if he or she had to, but for one reason or another does not, then the next step is to explore the possibility of a performance management problem. Here the solution involves modifying the conditions or the consequences associated with the desired performance. The Mager/Pipe model has identified four possible causes for nonperformance: 1) performance is punishing, 2) nonperformance is rewarding, 3) performance does not matter to the child, and 4) there are obstacles interfering with performance. Unlike the left side of the model, these causes do not follow in a linear fashion. Rather, each one is equally likely and the investigator should explore all the possibilities before deciding upon a "best" solution. While the solutions may seem obvious at first glance, it should be remembered that the source of a problem is frequently not identified at all. Once the source is identified, the solution often does logically follow. The model helps users to sort out where to focus their energies. The specifics of the intervention, how and when it will be applied and by whom, need to be worked out by individuals who work with the child.

The Intervention By Prescription Model

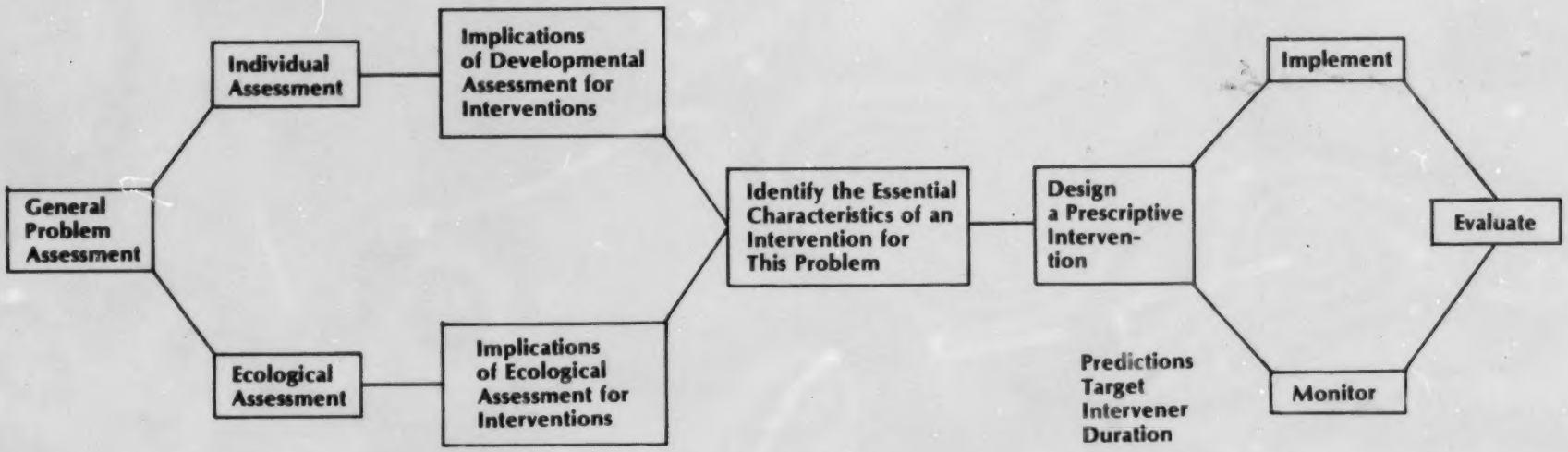
The second model (Figure 2, page 34), Intervention By Prescription (IBP), was developed as part of a grant sponsored by the U.S. Education Department. In contrast to the Mager/Pipe model, which is behaviorally oriented, the IBP model is more developmental in nature. The intent of the IBP model is to provide a structure which encourages school personnel to use a logical problem-solving process as they assemble data, analyze it, diagnose the problem, and proceed to select and evaluate prescriptive interventions in a manner which is guided by the data which have been assembled.

There are five progressive stages of the IBP model: 1) gathering assessment data, 2) determining the implications of the data, 3) devising an intervention and monitoring plan, 4) defining expected intervention outcomes, and 5) evaluation.

The basic problem-solving model is shown here. However, other more extensive problem-solving aides which are not shown here have been developed for the individual and ecological assessment part of the model. At the **assessment** phase, the model provides a series of questions which are arranged hierarchically according to developmental information. These questions are assembled in developmental order in a chain fashion in order to promote a systematic exploration of each of four selected developmental areas. Each chain focuses attention upon an area of development which is felt by the authors to be critical to diagnosis of emotional and behavioral problems; impulse control, affective preoccupation, social understanding, and problem solving. The chains were developed to facilitate and to structure diagnostic data gathering while keeping the options open for *how* information is collected. This is particularly important. Different individuals have different abilities and different techniques for gathering information about a problem. However, it is important to ensure that at least a basic set of areas are systematically explored. The psychologists and social workers may elect to do clinical interviews or parts of standardized instruments to gather diagnostic information. They may also choose to observe or work directly with the child, which is often the teacher consultant's manner of gathering information. In fact, while the model leaves the method of information-gathering open to individual choice, it is recommended that as much direct exploration be done with the student as possible. Personnel who use this model find the clinical interview, individual or small group role-playing activities, and problem resolution dilemmas to be particularly rich sources of information as they try to answer the developmental questions posed in the model. Developmental information may be gathered in informal or formal ways; through observation, the clinical interview, through role playing or problem resolution dilemmas in which the student is involved, or through standardized activities. The basic difference between this and other procedures is that in this model, the developmental questions and the problem-solving process itself guide the diagnostic activities, rather than the diagnostic activities and their results providing the answers to questions which may have only been incompletely asked, as is sometimes the case where standardized instruments are depended upon entirely.

After the assessment is completed, the child study team convenes to establish the **implications** of the data. Which implications bear directly upon intervention? Who should be the target of the intervention? Whose problem is this? What does the ecological information suggest about who in the child's ecology is most likely to succeed as the intervener? Are there any barriers in the

Figure 2: Intervention By Prescription Model



environment which might block successful implementation of the intervention? This is a critical and difficult step. As practitioners we too often want to jump ahead, to select an intervention from our often limited and over-used repertoire of interventions. It is not until the implications of the data have been clearly spelled out that we can be sure that a particular intervention will be what is needed. For example, if the student is a teenager in a junior high school setting, but has impulse control which is at a four-year-old level, the intervention must be specially designed. Any intervention which does not recognize and plan for the need for structure, for nearly immediate reinforcement and the problems of implementing such an intervention at the junior high level, will likely fail.

Next, a member of the child study team and the person designated to be the intervener meet to select or design the specific **intervention**. Both the implications of the data that were generated by the team and the personal style of the intervener are taken into account. In addition, they decide upon the duration of the intervention and how it should be monitored.

In the fourth stage of the process, the users define their expectations for the intervention. They specifically **predict the changes** which should occur if the intervention is on target. Team input is again critical at this stage. Relating the predictions back to the assessment data serve as a final check that the intervention does, in fact, come from the data. It also helps to keep the degree and nature of change in perspective. Is this a realistic plan for change?

Finally, **evaluation** of the intervention is accomplished. At the end of the "trial" intervention period (approximately 2 - 6 weeks), the team determines whether the intervention is on the right track. On the basis of this assessment, a determination is made whether to end the intervention, to modify it, to continue for a short time utilizing other sources of support, or to continue it on a longer-term basis under the auspices of special education services.

The concepts of "team approach," "child study," "intervention plan," "monitoring progress," and "evaluation" in and of themselves are not new concepts. In many schools, the team approach for decision making is well instituted. What differentiates the IBP model from the traditional team approach is the nature of the diagnostic information and the team's "mission." The requirement of the federal rules and regulations of P.L. 94-142 for providing service on the basis of "certifiable" handicaps has "instituted the medical-model by default" (Magliocca and Stephens, 1980). For the most part, the focus of team decision making is currently centered on whether a child should be referred to special education, whether he or she is likely to "fit" a particular label, and who should do what in preparation for an IEP. The IBP model, on the other hand, provides a vehicle for determining prescriptive interventions for a given problem regardless of where it stands in the system of service categories. It is not necessary to wait until a problem becomes sufficiently severe to qualify for special services before an intervention can be planned. The model decreases dependence on standardized testing and labeling rituals and increases dynamic exploration of a problem, both in terms of what is happening with the child (development) and around the child (ecology), by legitimizing the clinical interview and other informal, nonstandardized means of assessment. It helps to keep the energies of personnel focused on the task of solving a student problem, and provides a developmental base to assist personnel in understanding the problem and in selecting prescriptive, rather than habitually used, interventions.

Both of the models which have been discussed above help professionals who work with emotionally disturbed students to avoid getting caught in the conflict cycle. They help to provide the distance which is needed to convert conflict into coping. By providing critical questions for understanding a problem, these models help to shed light on the various parts of a problem and on potential causes. They help teacher consultants or other specialists to think about solutions that are prescriptive and to separate out their own personal issues from those about and around the student. All too often we have participated in fruitless discussions of whether or not a particular intervention, perhaps the first one which came to someone's mind, would or would not work. We have discussed solutions before we have thoroughly uncovered the needs of the student and patterns of the problem itself. Too often, we have also prematurely assigned the problem to the student without gathering sufficient information to determine whether it was really centered elsewhere. These models help to systematically guide explorations, helping individuals to stay on task with the problem-solving process. Since it is the process that is structured — the inquiry — and **not** the content, these models serve as flexible tools for analyzing and planning for many different types of problems.

Of the two models which we have described, the IBP model is perhaps the more flexible. Whereas the Mager/Pipe model specifies that a performance discrepancy exist within a particular individual, the IBP model does not presuppose either the nature or the locus of the problem. Thus, the IBP model can be helpful in sorting out issues and in problem solving at an earlier stage in the stress and conflict cycle than the Mager/Pipe model; at the first indications of a perceived problem, one does not have to wait for a performance discrepancy to surface. Consequently, the IBP model can be very useful in planning preventive intervention strategies as well — those which may alter the pattern of interactions sufficiently to avert the growth of a problem. The two models also differ in the **type** of information that is gathered in the problem-solving process. The Mager/Pipe model has a behavioral emphasis. The IBP model has a developmental and ecological focus.

Though they differ, both of the models are useful to teachers and other school personnel in separating out the various elements of a problem and in focusing attention upon critical factors. In this way, they assist cognition by drawing attention away from reactions and consideration of secondary issues and by directing energies towards the critical factors which surround a problem.

Often, when a classroom teacher contacts a school social worker with a perceived student problem, their main request is for relief from that problem. Social workers and other school helping personnel who have utilized these models have found that as they meet with the teacher and begin to sort out information according

to one of these schema, the teacher gains insight into the nature of the conflict, and emotional energies seem to be redirected towards a better understanding of the problem. Teachers have reported that they took the problem to the psychologist or social workers hoping the child would become a candidate for special education and be removed from the classroom. However, as they have gone through the problem-solving process, they have discovered that the problem was not as large as they had originally thought; that the student was indeed developing normally; or that, with a simple adjustment of the interaction between the student and themselves, the problem might be altered.

The IBP model has an additional benefit in problem solving beyond that of bringing clarity to the problem for individuals alone. This model is also helpful for systems, in that it helps personnel to document when the needs of the student and the most prescriptive intervention are hampered by or even unthinkable due to existing meaningless or misdirected policies of student management. In the earlier example of the junior high boy who had an attendance problem, the staff members, utilizing the IBP model, discovered that the problem was not only centered in the boy and in Mrs. Jones, but that policies of exclusion under these circumstances were not prescriptive and, indeed, counter-productive. School personnel have reported that the IBP model brings the appropriateness or inappropriateness of various school policies into stark light, helping personnel to evaluate the effectiveness of many policies and their goals. It is our contention also, that the strength of a problem-solving process makes it a critical tool, dramatically needed if we are to understand and effectively deal with the issues and dynamics of educating emotionally disturbed students.

References

Bloom, R.B. "The Effects of Disturbed Adolescents on Their Teachers". *Iowa Perspective*, April 1981, pp. 1; 3-7.

"Education of Handicapped Children: Implementation of Part B of the Education of Handicapped Children Act, Rules and Regulations." *Federal Register*, 42 (163, Section 121a.5), August 23, 1977.

Felleman, C.A. "Manifestations of Unconsciously Determined Behavior in the Teacher." *The Reiss-Davis Clinic Bulletin*, 1973, 10 (1), 3 - 11.

Festinger, L. *A Theory of Cognitive Dissonance*. Standford, Calif: Stanford University Press, 1957.

Kaufman, J.M. "Where Special Education for Disturbed Children is Going: Personal View." *Exceptional Children*, 1980, 46(7), 522 - 527.

Long, N.J. and Duffner, B. "The Stress Cycle or the Coping Cycle? The Impact of Home and School Stresses on Pupils' Classroom Behavior." In Long, N.J.; Morse, W.C.; and Newman, R.G. *Conflict in the Classroom* (4th ed.). Belmont, Calif: Wadworth Publishing Co., 1980.

Magliocca, L.A. and Stephens, T.M. "Child Identification or Child Inventory? A Critique of the Federal Design of Child Identification Systems Implemented Under P.L. 94-142." *The Journal of Special Education*, 1980, 14(1), 23 - 35.

Mager, R.F. and Pipe, P. *Analyzing Performance Problems or 'You Really Oughta Wanna.'* Belmont, Calif.: Fearon Publishers. 1970.

Meyen, E.L. and Moran, M.R. "A Perspective on the Unserved Mildly Handicapped." *Exceptional Children*, 1979, 45, 526 - 530.

Morse, W.C. and Bavlin, M.M. "Psychoeducation in the School Setting." In S.I. Harrison (Ed.) *Basic Handbook of Child Psychiatry* (Vol. 3) New York: Basic Books, 1979.

Morse, W.C. "Adults and Adolescents." *Iowa Perspective*, April 1981, pp. 8 - 10.

Pickhardt, C.E. "Fear in the Schools: How Students Make Teachers Afraid." *Educational Leadership*, November 1978, pp. 107 - 112.

Rezmierski, V. "A Challenge to Teachers." *Iowa Perspective*, April 1981, pp. 13 - 16.

Rezmierski, V.E.; Knoblock, P.; and Bloom, R.B. "The Psychoeducational Model. Theory and Historical Perspective." In L.B. McDowell. *Teaching Emotionally Disturbed Children*. Boston: Little, Brown Co., in press.

42

Pills or Skills for Hyperactive Children

by K. Daniel O'Leary

K. Daniel O'Leary is professor and past chairman of the Psychology Department of the State University of New York at Stony Brook. He is a clinical psychologist who received his Ph.D. from the University of Illinois at Urbanna. He is a past editor of the *Journal of Applied Behavior Analysis* and is currently associate editor of the *Journal of Abnormal Child Psychology*. He is also on other editoral boards.

O'Leary is past president of Division 12, Section III of the American Psychological Association, and he is a Fellow of the American Psychological Association (Divisons 7, 12, and 25). He is president-elect of the American Association for the Advancement of Behavior Therapy. He was also among the top 100 cited psychologists in the English-speaking world (*American Psychologist*, December, 1978).

An editor and author, O'Leary has numerous literary achievements. He has over 75 publications and his research has focused on token reinforcement, self-control, hyperactivity, and observational methodology. More recently, his research has been on marital therapy, the relationship between marital and child problems, and spouse abuse. His latest literary work is entitled *Coping with Behavior Problem Children*.

This manuscript was based on a Presidential address, Clinical Division, Section III, Experimental-Behavioral Science, American Psychological Association, Toronto, Canada, August 30, 1978. Special thanks are due Drs. Richard Allen, Russell Barkley, Kenneth Gadow, Jan Loney, Susan O'Leary, and Carol Whalen for detailed reviews of this manuscript. The opinions expressed herein, however, are those of the author and may or may not represent those of individual reviewers. Reprints may be obtained from the author, Department of Psychology, SUNY, Stony Brook, Long Island, New York 11794.

Although many of you may be aware of the furor surrounding the pharmacological treatment of hyperactive children, others may not be cognizant of the intensity or seriousness of the debate. Therefore, I would like to acquaint you with some of the social and political issues associated with the pharmacological treatment of hyperactivity. After discussing some of the reasons for this controversy, I will examine the scope of hyperactivity and note how it is diagnosed. Finally, I will ccdirect my attention to the merits of both pharmacological and psychological treatments for hyperactivity.

Controversy over Drug Treatment

The controversy over the pharmacological treatment of hyperactive children is illustrated by the following three events which brought national attention to the problem.

1. In 1970, the *Washington Post* reported that five to ten percent of children in Omaha, Nebraska, were given psychostimulant medication for hyperactivity. That incorrect report (Maynard, 1970) and various media renditions of it, which became known as "The Omaha Incident," sparked Congressional hearings on the use of stimulant medication with children. (Actually, the Assistant Superintendent of the Omaha School District would not estimate the percentage of children on medication, but a local physician estimated five to ten percent of the school population.)

2. In 1975, two free-lance authors, Schrag and Divoky, wrote a book, *The Myth of the Hyperactive Child*, which received considerable publicity as illustrated by Schrag's synopsis of their book in the *New York Times*. That synopsis was titled "Readin', Writin' (and Druggin')" (Schrag, 1975). The essence of their message is contained in the following quotation from Schrag's article.

> Before scientists have had a chance to systematically study and refine the issues, the field has become the domain of educators and the drug industry. It has also become a playground for charlatans. . . . There is some evidence, however, that the drugs do make some children more docile (which makes some teachers happy), that in some cases they can induce psychotic episodes and hallucinations, and that in many, if not most, they cause irreversible weight loss and a stunting of growth. What the kids are getting is speed (p. 13).

In fact, Schrag and Divoky's well-publicized statements are clearly exaggerated and, in certain cases, patently false. For example, there is no clear evidence that there is irrreversible weight loss or growth stunting associated with psychostimulant use (Roche, Lipman, Overall, & Hung, in press). Rather, there is a distinct growth rebound when children cease taking Dexedrine (Safer & Allen, 1976). Further, hyperactive children are not receiving Methedrine, the specific amphetamine known as "speed," and, interestingly, they do not report the "high" experienced by adults when they take psychostimulants. *The Myth of the Hyperactive Child* was written as an investigative report. Although it contained important inaccuracies and polemics, it was

Reprinted with permission of Journal of Applied Behavior Analysis, 1980, 13, 191-204, Number 1 (Spring 1980)

nevertheless informative and it well illustrated the problems of diagnosing and treating hyperactive children.

3. In 1978, the *American Educator*, the professional journal of the American Federation of Teachers, carried an article titled "Hyperactivity: The Scandalous Silence," by Stephen Box, a sociology lecturer from England. The central theme of the article was as follows:

> There is a scandalous silence about a form of violence going on in the schools. . . . The violence I refer to is the increasing employment of "medical solutions" to problems which are essentially moral, legal, and social. . . . Instead of recognizing the inarticulate cries of rage and despair and examining the very serious problems these hyperactive children face, there is an intense drive to individualize their problems, and blame them on organic impairments; . . . Drugs are then administered to dampen and confuse the child's scarcely heard protests. In this way the minds of a generation of the ethnically and economically deprived are being hollowed out, and the revolt of a potentially delinquent population avoided (pp. 22-24).

Like the Schrag and Divoky book, this article made an emotional plea to rethink the place of the medical and psychiatric establishment in the education of children. "The Omaha Incident," Schrag and Divoky's book, and Box's article clearly exposed the public to the problem of treatment of hyperactive children, and the impact of these publications illustrates the public's serious concern about this problem. No serious-minded clinician who sees families or children can ignore the knotty issues of pharmacological vs. psychological treatment of hyperactive children. When the issue is aired on national television and discussed in a magazine that reaches every member of a major teachers' union in this country, we are besieged by parents and teachers alike who are confused about what can or should be done for their children who are labeled hyperactive. Parents are plagued by a plethora of both causes and cures for this problem, and my intent here will be to discuss: 1) the incidence of hyperactivity and the use of various treatments, 2) what constitutes hyperactivity, and 3) the advantages and disadvantages of psychostimulant medication and behavior modification (i.e., pills and skills).

Incidence of Hyperactivity

The concern about treating hyperactivity has come into bold focus in part because of the incidence of hyperactivity and the marked increase in the use of psychostimulant drugs for hyperactivity in the past 20 years. Hyperactivity was infrequently discussed and diagnosed 15 years ago, but in 1971, according to a DHEW report, 5 percent of elementary school children were hyperactive. Alternately stated, on the average at least one hyperactive child existed in every elementary school classroom. Several surveys reported that hyperactivity was present in as many as 30 percent of the cases seen in child psychological clinics and in 10 percent of the regular caseloads of pediatric clinics. As Safer and Allen (1976) stated: "The most common child psychiatric disability is hyperactivity."

Incidence of Drug Treatment

Survey data from Baltimore county indicated that the percentage of children receiving medication for hyperactivity increased from 1.07 percent in 1971, to 1.73 percent in 1973, to 2.08 percent in 1975, and to 2.12 percent in 1977 (Krager, Safer, & Earhardt, 1979). As Sprague and Gadow (1976) pointed out, estimates of the number of children in the United States on psychostimulant medication vary considerably depending upon whether the estimates are based on school nurse surveys, physician surveys, or the National Disease and Therapeutic Index (NDTI), an index based on private practice physicians stratified by regions of the country. Furthermore, usage varies with geographic region (Whalen & Henker, in press). Utilizing the best information available, however, it appears that approximately 600,000 to 700,000 children receive psychostimulant medication for hyperactivity during the school year. The number of children receiving such medication may be leveling off, but the incidence of psychostimulant use has increased markedly since the early 1960s (Sprague & Gadow, 1976).

In this author's opinion, the burgeoning number of children diagnosed as hyperactive has been at least partly spurred by the pharmaceutical industries. For example, from January to Septemer 1979, full-page advertisements for psychostimulants for hyperactivity appeared in seven of nine *Pediatrics* issues. Interestingly, by far the greatest advertising is for Cylert (pemoline), a new drug whose use is greatly increasing. Of course, other factors such as physicans' ability to save children who might have died from birth complications; increased environmental pollutants, such as lead (Baloh, Sturm, Greene, & Gleser, 1975; Needleman, Gunnoe, Leviton, Reed, Peresie, Maher, & Barrett, 1979); food additives (Rose, 1978); greater public awareness, and more objective assessments of hyperactivity, may well have contributed to the increasing diagnosis of hyperactivity. However, when the potential market for a medication is five percent of all elementary school children, that market is very big business.

Incidence of Dietary Treatment

Dietary specialists and allergists have also begun to stake their claim on the hyperactivity market as illustrated by the phenomenal development of Feingold associations in this country since the publication of Feingold's book, *Why Your Child is Hyperactive*, in 1975. Feingold's approach involves the elimination of artificial food coloring—especially red and yellow dyes; a preservative—BHT (Butolated hydroxy tolulene), as well as natural salicylates contained in foods such as apricots, prunes, raspberries, tomatoes, and cucumbers. Feingold reported that when he placed hyperactive children on a salicylate-free diet, 30 percent showed a response that he termed dramatic and 18 percent more responded favorably. Although his claims have been tested and

found lacking substantiation[1] for *most* children in at least five controlled studies (Harley, in press), the Feingold associations, as well as other natural food groups, have been so powerful that they have convinced some food chains to package foods labeled additive and preservative free. Although it is impossible to determine the precise number, probably at least 200,000 children are on the Feingold diet (based on number of families in Feingold associations in the U.S., Random House sales figures of Feingold's book from 1975-1978,[2] and estimates of treatment regimens [Lambert, Sandoval, & Sassone, 1978]).

In summary, two salient developments, the use of psychostimulant medication and a dietary approach, have prompted a shift in the conceptualization of behaviors previously seen as attentional problems, character problems, laziness, and lack of directedness. Such behaviors, which are now labeled hyperactive, have often been attributed to brain dysfunction or food sensitivities. The brain dysfunction was to be treated with medication and food sensitivity with a dietary regimen. Both of these conceptualizations gave parents a ready means of switching the onus of responsibility from society, schools, and themselves to the physician and to physical causes. Although it is true that the hyperactive behavior of a small percentage of hyperactive children is due to clear neurological deficits, it seems equally plausible to seek the crucial etiological factors of hyperactivity of many children in the home, social, and educational environment.

Although no social learning theorist has postulated that hyperactivity per se is learned, it is this author's opinion that many behaviors characteristic of hyperactivity certainly could be learned. "For example, of the behaviors which distinguish hyperactive from normal children (Stewart, Pitts, Craig, & Dieruf, 1966), the following behaviors presumably are influenced by learning: talks too much, leaves class without permission, constantly demands candy, can't tolerate teasing, is destructive, is defiant, doesn't complete projects" (O'Leary, in press, pp. 7-8). As I mentioned earlier, hyperactivity was not discussed much until two decades ago, and many people currently feel that professionals are simply relabeling "Peck's Bad Boy" by invoking a medical label or diagnosis. Frankly, I never heard the label, hyperactive, when I was in elementary school in the late 1940s. Kids with short attention spans and short frustration tolerances were simply described as clowns, lazy, silly, and not liking school. With five percent of elementary school children hyperactive—two percent of them who are on medication, one percent who have tried or are on the Feingold diet, and an undertermined percentage who are receiving behavior therapy—one may ask why are so many children treated at all? Often these children, whether labeled "Peck's Bad Boys" or hyperactive, do not progress academically or socially and they do need help. The question of interest is what type of help is needed? To decide that, it seems especially important to know what constitutes hyperactivity.

Definition of Hyperactivity

According to the American Psychiatric Association's *Diagnostic and Statistical Manual* (APA, DSM-II 1968),[3] a hyperactive or hyperkinetic child is a child characterized by short attention span, restlessness, and overactivity. This seemingly straightforward definition of hyperactivity based on overt behaviors is misleading, for, in fact, children with other behavioral problems such as conduct disorders or unsocialized aggressive reactions have the same difficulties, i.e., short attention span, restlessness, and overactivity. Because of the problem of differential diagnosis of children, some investigators prefer the term "minimal brain dysfunction" (Wender, 1971), because the term was purportedly related to the causes of hyperactivity. Others have long resorted to drug responsiveness as a means of defining hyperactivity and implicated brain damage as a cause of the problem. Neither of these means of defining hyperactivity seems useful. In the first place, there is no evidence indicating that all or even most hyperactivity results from minimal brain dysfunction (Rutter, 1977). Because of the frequent assumption that hyperactivity results from brain dysfunction and/or a neurological lag, psychostimulant medication has been given. It was thought that such central nervous system stimulants would somehow act on that deficit and enable the child to function normally. Therefore, it was believed that hyperactive children had a dysfunction that was not present in normals and which could be ameliorated by psychostimulants. However, in studies by Shetty (1971) and Rapoport, Buchsbaum, Zahn, Weingartner, Ludlow, and Mikkelson (1978), it has been seen that normal children exhibit the same responsiveness to medication as do hyperactives.

Diagnosing hyperactivity on the basis of drug responsiveness appears to deny causes of hyperactivity such as environmental and nutritional determinants. In brief, it would appear best to simply use the terms "responders" and "nonresponders" to medication and eliminate the logical fallacy and excess conceptual baggage associated with labeling on the basis of responsiveness to a medication.

At present, it appears most reasonable to regard hyperactivty as a set of behaviors—such as excessive restlessness and short attention span—that are quantitatively and qualitatively different from those of children of the same sex, mental age, and SES. In fact, normative data from teacher ratings have been obtained that show that in the United States and New Zealand, such ratings can reliably place children in the upper five percent of the population (Werry, Sprague, & Cohen, 1975).

[1]Rose (1978) illustrated the deleterious effects of large amounts of additives, but he was not testing the Feingold diet per se.

[2]There have been approximately 170,000 copies of the Feingold book sold since 1978. Information provided by Random House, August 24, 1978.

[3]The proposed DSM-III contains a new classification, *Attention Deficit Disorder*, which is to replace the term hyperkinesis. Subcategories include: 1) uncomplicated, 2) with hyperactivity, 3) with conduct problems, and 4) with conduct problems and hyperactivity.

The most frequently used measurement device, the Teacher Rating Scale (TRS) (Conners, 1969), reflects more than a simple judgment regarding activity level. It implicitly allows a teacher to make qualitative judgments about the appropriateness, relevance, and goal-directed nature of the behavior. Investigators have used the Conners TRS as well as similar scales by Davids (1971), Blunden, Spring, and Greenberg (1974), and Zukow, Zukow, and Bentler (1978) to select hyperactive children for research and clinical purposes. However, statistical deviance on the basis of qualitative and quantitative teacher norms is not enough to define hyperactivity adequately. Investigators like Stewart (Stewart & Olds, 1973) rule out such behaviors as descriptors of hyperactivity when they can be attributed to chronic medical or neurological disease or to severe behavioral disturbances such as childhood psychoses or mental retardation. In addition, the child's behavior should be viewed as problematic across situations (e.g., with different teachers). Finally, evidence should be obtained indicating that the hyperactive behaviors have persisted across time. With the exclusion of hyperactive chlldren due to chronic disease and severe behavioral disturbances, and the emphasis on consistency in hyperactive behavior across time and situations, we are usually dealing with hyperactive children who are simply at the end of a normal distribution for activity and poor impulse control and inattention.

The complexity of the problem of hyperactivity for parents was well illustrated by Ross and Ross (1976) who compiled descriptions of behaviors commonly exhibited by hyperactive individuals across various age periods (see Table 1). As they emphasized, few hyperactive individuals exhibit the entire constellation of behaviors at any one age period. Rather, it is the *cumulative* effect of the number of problematic behaviors that leads parents and hyperactive individuals to seek professional help. Although it is true that excessive motoric activity level per se does *not* remain a distinguishing characteristic of an individual diagnosed hyperactive as a child throughout his or her life, it is clear that as many as one-third of the individuals diagnosed as hyperactive in childhood have very serious emotional and vocational problems as adults (Laufer, 1971; Ross & Ross, 1976).

Differential Diagnosis

One of the most difficult problems facing any clinician is differential diagnosis of hyperactivity and aggressive conduct disorders. Although these two syndromes are clearly not totally independent, unless one wishes to argue that every "difficult" child should be medicated, differential diagnosis becomes a paramount concern. Unfortunately, nobody has devised an empirical scheme that can be used by a clinician to make such a differential diagnosis. In fact, the Conners TRS, the most widely used measure to assess responsiveness to treatment, has both an aggressive-conduct factor and a hyperactivity factor, but the correlation between these scales was found by Werry et al. (1975) to be 77. Given such a high correlation between factors, differential diagnosis is especially difficult.

Loney, Langhorne, and Paternite (1978) attacked the problem of differential diagnosis by first making a hypothetical distinction between primary or core symptoms (e.g., hyperactivity and inattention) and secondary or resultant symptoms (e.g., self-esteem deficits and delinquent behavior) that were thought to arise from the hyperkinetic child's "flawed interactions with his/her environment." Using a sample of 135 boys from the ages of 4 to 12, ratings by 2 trained judges of primary, secondary, and unclassified marker symptoms were obtained. The raters used psychiatric, psychological, and social work reports to make their ratings. A factor analysis (principal axis with subsequent orthogonal rotation) yielded two relatively independent major factors, (viz., aggression and hyperactivity). These factors had intercorrelations of only .27. (See Table 2, page 41 for a description of the variables which had significant loadings on Factors 1 and 11.)

To assess the concurrent validity of these factors, parent intake checklists and school report data were correlated with these factors. High scores on the aggression factor were significantly correlated with parents describing their children as inconsiderate, cruel, and quick-tempered, and with teachers describing them as defiant and stubborn and having temper outbursts. High scores on the hyperactivity factor correlated with parental descriptions of impulsivity and with teachers' descriptions of excessive demands for teacher attention, restlessness, overactivity, not being accepted by the peer group, and not being a leader. Further, the hyperative boys had more visual motor difficulties and were more responsive to CNS stimulants. The aggressive boys were younger at referral and had fewer neurological signs. Thus, we find empirical confirmation by Loney et al. for a clinical picture of hyperactivity and aggressiveness that has been long proffered by individuals like Werry (1978).

Table 1

Behavioral Characteristics of Hyperactives

Age	Description of child
Infancy	Difficult and unpredictable
	Apoplectic to calm
	Querulous, irritable
	Rarely smiles
	Erratic sleep
Preschool	Sharp-temper
	Strong willed
	Excessively demanding
	Light sleeper
	Short attention span

Continued on next page. . .

Table 1 continued. . .

Age	Description of child
Middle Childhood	Extremely active Difficulty sitting still Unable to remain seated during meal Distractible Light sleeper Often sad or depressed Poor school performance
Adolescence	Poor self-image Poor school performance Lack of social skills Rejection by parents and siblings Decrease in activity level Aggressiveness
Adulthood	Personality disorders Explosive personality Alcoholism

Table 2

Factor Loadings from Varimax-Rotated Factor Matrix

Variable	Factor I (aggression)	Factor II (HA)
Control deficits	.91	.14
Negative affect	.80	.12
Aggressive interpersonal relationships	.73	.07
Judgment deficits	.27	.62
Hyperactivity	.13	.60
Inattention	.06	.60

A note of caution is in order. Loney et al. studied a population of boys who were labeled initially as MBD, and we do not know what results would be obtained with a more clearly mixed group of hyperactive, minimal brain dysfunction, and conduct problem children. Seventy percent of the sample were diagnosed Hyperkinetic Reaction of Childhood, whereas only nine percent were diagnosed Unsocialized Aggressive Reaction or Adjustment Reaction.[4] Studies with populations representative of those in most clinical settings are clearly necessary before one could apply these results in a general clinical facility. However, this successful foray into differential diagnosis is especially promising and the identification of subgroups of children based on hyperactivity and aggression scores seems well worth pursuing.

The controversy over pharmacological treatment of hyperactive children, definitional problems, and differential diagnoses are some of the major issues that professionals must address. The applied researcher and the clincian, however, should be highly cognizant of the effects of behavioral and pharmacological treatments on hyperactive children. Thus, the effects of such treatments on social and academic behavior will now be examined.

Effects on Social Behaviors: Psychostimulant Treatment

The studies used to assess changes have included contrasted groups, crossover designs, and double blind evaluations, i.e., neither the observer nor the child knew whether a placebo or an active medication was being used. On the basis of teacher ratings, hyperactive children are judged more cooperative, attentive, and compliant when treated with psychostimulants (Conners & Werry, 1979, pp. 336-386). These studies have been replicated so often that it is unnecessary to comment about them in any detail (for a recent review, see Cantwell & Carlson, 1978, pp. 171-207).

The particular social behaviors that change with psychostimulants have only recently been scrutinized with direct observational methodology, but it appears that movement, fidgeting, attention, and compliance are the most likely behaviors to be modified (Barkley, 1977). Interestingly, in contrast, the children become less initiating of social contact (Whalen, Henker, Collins, Finck, & Dotemoto, 1979). In brief, the effects of psychostimulants on increasing attention and decreasing classroom disruption are well established. However, it is not clear whether increased attention mediates all changes in social behavior or whether some social behaviors change directly with medication in situations in which attentional levels remain constant.

As noted above, the particular social behaviors that are affected by psychostimulants are not well understood. Until recently, few studies included direct observation of social behavior. Instead, teacher ratings were the primary dependent measures. The Whalen et al. (1979) study has not been replicated. Further, in that study the decrease in social initiation was seen in only one of two types of classroom activities, e.g., in a self-paced activity but not in a teacher-paced activity, and the reliability for occurrence of social initiations was relatively low. Finally, no standardized assessment measures were used for the diagnosis of hyperactivity.

Effects on Social Behavior: Behavior Therapy

Behavior therapy approaches emphasizing reinforcement of behavior in the classroom, teacher consultation, and home-based reinforcement have been shown repeatedly to lead to salutary changes in

[4]Personal Communication, Jan Loney, November 10, 1978

social behavior. Such changes have been obtained on standardized teacher ratings as well as on independent observations of classroom behavior (e.g., Ayllon, Layman, & Kandel, 1975; Gittelman-Klein, Klein, Abikoff, Katz, Gloisten, & Kates, 1976; K. D. O'Leary, Pelham, Rosenbaum, & Price, 1976; S. G. O'Leary & Pelham, 1978; Rosenbaum, O'Leary, & Jacob, 1975). On the other hand, behavior therapy researchers using a self-control or self-instructional approach with hyperactive children assessed with standardized measures have not found changes in social behavior in the classroom (e.g., Douglas, Parry, Marton, & Garson, 1976; Friedling & O'Leary, 1979; Bugental, Whalen, & Henker, 1977).

In brief, behavior therapy approaches emphasizing reinforcement of desired classroom behavior, teacher consultation, and parent consultation have shown consistent positive effects in studies ranging from one week to five months. The particular behaviors that are usually changed include: attention levels, completion of assignments, cooperation with peers, and disruptiveness.

Effects on Academic Behaviors: Psychostimulant Treatment

As mentioned earlier, psychostimulants have been used for approximately two decades and there are scores of studies in which changes on standardized achievement tests were assessed. The reasons psychostimulants were expected by many to influence achievement were that laboratory research had repeatedly revealed that attention spans of hyperactive children increased with psychostimulants, and some clinicians reported that school achievement increased (Bradley, 1937). Given the increased attention spans as well as reductions in overactivity and restlessness in classrooms, clinicians and researchers alike felt that the hyperactive children on psychostimulants would profit more from their classroom endeavors than hyperactive children not on such medication. In fact, many studies have indicated that teachers *perceive* hyperactive children as having improved "achievement" while on stimulant drugs. On the other hand, as Barkley and Cunningham (1978) noted, there is a sizable body of literature which suggests that increased achievement does not occur.

From short-term drug studies there is no consistent evidence across studies that children improve academically. However, as Sprague and Berger (in press), recently noted, many short-term studies are so brief (e.g., eight weeks) that one would not expect achievement changes, given the means, standardized deviations, standard error of estimates of tests, and small number of items at each grade level (e.g., the WRAT). But, even in evaluations of moderate length (e.g., three to six months) where significant gains might be obtained, no consistent achievement gains on the WRAT have been associated with drug treatment (e.g., Conrad, Dworkin, Shai, & Tobiessen, 1971; Gittelman-Klein & Klein, 1976; Hoffman, Engelhardt, Margolis, Polizos, Waizer, & Rosenfeld, 1974).

As Rie and Rie (1977) noted, the effects of CNS stimulants that are sometimes cited are primarily due to enhanced attention during testing, not to a change in academic skills. This point was made salient in their research in which "achievement test gains" were seen immediately upon a trial of psychostimulants. The long-term effects of psychostimulant medication are even less clear than short-term effects because none of the studies meets most experimental design criteria. Most of the long-term studies in which children had been assessed on psychostimulants are simply follow-up studies, and comparisons were made with children who did not accept psychostimulant treatment or with children who had discontinued treatment. An exception is the work of Weiss, Kluger, Danielson, and Elman (1975) who compared children (matched for age, sex, IQ, and SES) who were treated with methylphenidate (Ritalin) or chlorpromazine (Thorazine) with children who received medication for less than four months, i.e., the nondrug group. The children in the drug groups received medication for three to five years, and follow-up evaluations were made five years after termination of medication use. Even this study was plagued by nonrandom assignment, treatment for one drug group at a time different from another, and nonequivalence of groups at the outset of the study. Even accepting these problems, there have been no long-term studies in which hyperactive children with psychosimulants fare better than those who do not receive such medication.

The comments of the investigators themselves are especially interesting. Weiss et al. (1975) said: "Perhaps our findings can be summarized by suggesting that we initially expected too much from any drug or from any one method of treatment of hyperactive children. . . . Although the hyperactive child on stimulants generally becomes easier to handle, his outcome may be only slightly or not at all affected. . . . It was wishful thinking on our part that a useful drug alone would change the outcome of a fairly serious condition like severe chronic hyperactivity" (p. 164). Riddle and Rapoport (1976) commenting on their 2-year follow-up of 72 hyperactive boys said: "The continued difficulties . . . in spite of faithful stimulant drug intake, ancillary educational and psychiatric support are disappointing. . . . An 'optimally medicated' group had almost identical academic achievement and social acceptance as did a group of drop-outs from drug treatment or the sample as a whole" (p. 126).

In summary, psychostimulants have been shown repeatedly and consistently to influence social behavior in classrooms and attentional behavior in laboratory situations on a short-term basis. Ratings and objective measures of attention and concentration almost always show salutary changes. Given the academic achievement measures used in most short-term classroom studies to date (six to eight weeks), one would not expect, nor does one find, significant changes in academic achievement over these brief intervals of treatment with psychostimulants. However, in the studies of four to six months duration where academic achievement gains might be expected, positive results have not been obtained either. Even the investigators who have conducted the long-term drug studies and have followed up hyperactive children who were on medication for a number of years feel that there is ample reason for skepticism regarding the efficacy of long-

term psychostimulant use on academic achievement. Although we cannot argue that hyperactive children treated with CNS stimulants do better academically than those not so treated, it is premature to say that they could not. There is a critical need for carefully controlled, long-term, outcome research.

Effects on Academic Behavior: Behavioral Treatment

Most behavioral treatment studies have not used standardized measures of academic achievement because, at least in our own research, we would not have expected significant increases on standardized achievement tests such as the WRAT or CAT in one to three months. There have, however, been assessments of daily or weekly academic production rates, and when hyperactive children are placed in home-based or class-based reinforcement programs, academic production rates increase (Ayllon et al., 1975; Wolraich, Drummond, Salomon, O'Brien, & Sivage, 1978). Such increases are certainly not surprising because many behavior therapists try to choose academic behaviors for at least half of the targets for intervention. This increased emphasis on academic targets has been fairly common since the critisms of Winett and Winkler (1972) and the reports that there often was little increase in academic production when behaviors like disruptiveness decreased and attention level increased (see review of K. D. O'Leary & S. G. O'Leary, 1977).

There is suggestive evidence that hyperactive children's achievement is significantly improved as a result of self-instructional training (Douglas et al., 1976). In a three-month self-control program supplemented with direct instruction and contingency management, the treated children showed significantly greater gains on laboratory and achievement tests than untreated controls. On the other hand, Friedling and O'Leary (1979) failed to find evidence for the utility of self-instruction training with hyperactives on academic tasks. Self-instructional training appears to influence impulsive behavior of children on laboratory tasks, but whether it contributes significantly to academic achievement of hyperactive children is not clear. There is a critical need for replication and extensions of behavioral treatments for periods of at least 6 to 12 months so that we can decide if such programs can effect academic changes on standardized achievement tests. However, given that daily and weekly assignment-completion have increased with behavioral programs for hyperactive children, given that improvements on standardized achievement tests have occurred with self-instructional training, and given that we have found changes on standardized tests with children labeled Conduct Disorder (Kent & O'Leary, 1976), it seems very likely that a behavioral treatment program for hyperactive children could lead to long-range academic and social changes.

Pills or Skills: Is It an Either-Or Question?

In the last few years, it has become apparent that psychostimulant treatment is not a cure for hyperactivity (Connors, Denhoff, Millichap, & S. G. O'Leary, 1978). Furthermore, psychostimulant treatment has physical side effects such as increased heart and blood pressure rates and, in some instances—though clearly not all—it appears that growth rates have been suppressed (Roche, Lipman, Overall, & Hung, in press; Safer, Allen, & Barr, 1972; Weiss et al., 1975). Classroom disruptiveness decreases but some cognitive functions (e.g., memory, Sprague & Sleator, 1977; Sprague & Berger, in press; learning, Swanson, Kinsbourne, Roberts, & Zucker, 1978) may be impaired with commonly administered dosages of Ritalin. Approximately 70 percent of hyperactive children are clearly more "manageable" on medication, but the long-range social and academic effects of such treatment are not clear. The long-term studies do not enable us to make an unequivocal conclusion about long-term medication use, but the sole use of psychostimulant medication as a treatment is increasingly questioned by members of all mental health groups, and the follow-up studies conducted thus far do not give us great hopes for CNS treatment alone.

Behavior therapy has shown salutary changes on both academic and social behavior in studies of one to four months, but no long-term treatment studies have been conducted with hyperactive children. However, based on the long-term treatment research with conduct-problem children (Kent & O'Leary, 1976), the successful transfer of hyperactive children from pharmacological to behavioral treatment (S. G. O'Leary & Pelham, 1978), the academic gains with hyperactive children in behavioral programs (Ayllon et al., 1975; Douglas et al., 1976), there is ample reason to be optimistic about the viability of a behavioral approach. This optimism must be tempered by the fact that Kent and O'Leary did not work with children specifically diagnosed as hyperactive, although as noted earlier, the overlap between hyperactivity and conduct problems/aggression is very great. Secondly, cautious optimism is in order since the total number of treated subjects in the three behavioral studies showing academic gains with hyperactive children was only 41 (Ayllon et al., 1975, 3; Douglas et al., 1976, 18; Wolraich et al., 1978, 20). Further, Gittelman-Klein et al. (1976) showed superiority of pharmacological interventions over an eight-week behavioral treatment program as judged by classroom observations and teacher ratings.

Regardless of one's theoretical or empirical predilections, on occasion behavioral inteventions may have to be supplemented with psychostimulants. For example, if the child is especially inattentive and is unresponsive to varied behavioral interventions, a combination of medication and behavioral interventions may be advised (Conners et al., 1978). In fact, Satterfield, Cantwell, and Satterfield (1979) found that a combination of pharmacological and psychotherapeutic approaches was associated with "an unexpectedly good outcome." More specifically, a year-long program of methylphenidate and a combination of psychodynamic and behavior therapy for families was associated with clear social *and* academic improvement. Of special interest was the investigators' goal to prescribe dosages as low as possible that were still sufficient to benefit the child. The average dosage was 25 mg at the end of one year of treatment for boys who were primarily between 8 to 12 years old. In a related

vein, Pelham, Schnedler, Bologna, and Contreras (in press) provided suggestive evidence that a combination of psychostimulant medication and behavior therapy may be more effective than either treatment alone for hyperactive children in school settings.

There are occasions when parents are so plagued by their own personal and/or marital problems or are so angry at their child because of difficulties encountered with him or her that they could not help implement a program for their hyperactive child. Then, in these cases, psychostimulant medication would be advised as a temporary alternative or adjunct to behavior therapy. Use of psychostimulant medication in some cases may lead to decreased marital tension caused or exacerbated by a hyperactive child, and the parents may later be more able to implement a behavioral program. However, it has been my experience that teachers often see little need for psychological or educational intervention after placing their child on psychostimulants. I would not initially use pharmacological inteventions with most hyperactive children because the behaviors that characterize the hyperactive syndrome are so dramatically, although fleetingly, changed by psychostimulants that the parents, teachers, and children may view the medication as a panacea and we know that such is very far from the truth.

Suggested Research Directions

Assessment research, especially differential assessment of hyperactive versus aggressive children, is sorely needed. If these two groups cannot be reliably differentiated, arguments will abound regarding whether all children with problems of hyperactivity and aggression should be treated with psychostimulants (cf. Winsberg, Yepes, & Bialer, 1976).

Replications of the Sprague and Sleator (1977) and Swanson et al., (1978) studies are needed, for if memory and learning are really impaired with commonly administered dosages of Ritalin, the failure of the children to show improvement on academic achievement tasks may be more readily understood.

Long-term treatment research comparing behavioral and pharmacological interventions and combinations thereof with multiple dependent measures in the school and home is critical if we are to address many questions raised in this manuscript. A multiclinic study of the scope of the NIMH depression study to start in 1980 is certainly in order (Weinckowski & Pardes, 1978). Both pharmacological and behavioral treatments have documented efficacy and researchers feel they both have long-term promise. However, single researchers or single research teams cannot well address long- and short-term treatment efficacy problems. A large-scale multiclinic research effort is now needed, and greater emphasis should be placed on: 1) academic changes as assessed by teacher ratings and standardized achievement tests, 2) family changes as assessed by after-school ratings and observations and assessment of marital discord and family discord, 3) detailed cost analyses of treatment programs, and 4) consumer satisfactions with the treatments (e.g., child, parent, teacher, and tutor). To address these emphases is beyond the scope of a single investigating team. Further, replicability across treatment sites is needed to arrive at unequivocal conclusions, and few, if any, research teams have the clinical and research capabilities to address these emphases well. At a minimum, researchers from different sites should coordinate their efforts to begin to allow us to reach conclusions that are not plagued by idiosyncracies of particular therapists, programs, or contextual variables (e.g., cooperation from school board or superintendent).

Individual subject analyses could be very profitable in determining parametric effects of medication and environmental events. For example, the finding of Whalen et al. (1979) regarding decreases in social contact of other children to children on medication and the finding by Barkley and Cunningham (1978) that medicated children decrease their initiation of mother contacts should be pursued in varied contexts with varied dosages of medication. The replicability and *magnitude* of these effects should be clearly delineated and explicated for clinicians.

Hyperactive children are indistinguishable from randomly selected same-sex peers in certain situations characterized by little restraint in terms of task demands (Jacob, O'Leary, & Rosenblad, 1978). It would be of interest to ascertain whether the hyperactive children view themselves more positively in those situations than in those characterized by higher task demands. Further, the peers of the hyperactive children might view the hyperactive child quite differently in situations with varied task demands. If salutary social effects were obtained in situations more like open classrooms, of course, the questions of relative academic achievement in the two situations would have to be addressed.

The research by Shetty (1971) and Rapoport et al. (1978) on the short-term effects of psychostimulants on normal and hyperactive children was especially important from a theoretical standpoint. The study was important because both groups of children showed similar salutary behavioral changes. Such results should lead us to question seriously the models that purport that hyperactivity results from brain dysfunction which is differentially improved by medication. These efforts clearly warrant replication and extension.

The field of applied behavior analysis has gained a reputation for scrutiny of effects on individual subjects. As one moves from the more dramatic behavior change procedures (e.g., use of Ritalin or use of a home-based token reinforcement program), it is often tempting to use research strategies employing large numbers of subjects so that even small effects may be detected with statistical analyses. Such a research strategy is often useful in hypothesis formation and in analyzing effects of variables which interact with others. However, the practitioner needs to know about the magnitude of effects for certain treatments for individual subjects and careful documentation of such continues to be in order even when large-scale group design research is employed.

References

American Psychiatric Association. *Diagnostic and Statistical Manual*. Washington, D.C.: American Psychiatric Association, 1968.

Ayllon, T.; Layman, D.; and Kandel, H. J. "A Behavioral Educational Alternative to Drug Control of Hyperactive Children." *Journal of Applied Behavior Analysis*, 1975, **8**, 137-146.

Baloh, R.; Sturm, R.; Greene, B.; and Gleser, G. "Neuropsychological Effects of Chronic Asymptomatic Lead Absorption." *Archives of Neurology*, 1975, **32**, 326-330.

Barkley, R. A. "The Effects of Methylphenidate on Various Types of Activity Level and Attention in Hyperkinetic Children." *Journal of Abnormal Child Psychology*, 1977, **5**, 351-369.

Barkley, R. A., and Cunningham, C. E. "Do Stimulant Drugs Improve the Academic Performance of Hyperkinetic Children?" *Clinical Pediatrics*, 1978, **17**, 85-92.

Blunden, D.; Spring, C.; and Greenberg, L. M. "Validation of the Classroom Behavior Inventory." *Journal of Consulting and Clinical Psychology*, 1974, **42**, 84-88.

Box, S. "Hyperactivity: The Scandalous Silence." *American Educator*, Summer, 1978, 22-24.

Bradley, C. "The Behavior of Children Receiving Benzedrine." American Journal of Psychiatry, 1937, **94**, 579-585.

Bugental, D. B.; Whalen, C. K.; and Henker, B. "Causal Attributions of Hyperactive Children and Motivational Assumptions of Hyperactive Children and Motivational Assumptions of Two Behavior-change Approaches: Evidence for an Interactionist Position." *Child Development*, 1977, **48**, 847-884.

Cantwell, D. P., and Carlson, G. A. "Stimulants." In J. S. Werry (Ed.), *Pediatric Psychopharmacology: The Use of Behavior Modifying Drugs on Children*. New York: Brunner-Mazel, 1978.

Conners, C. K. "A Teacher Rating Scale for Use in Drug Studies with Children." *American Journal of Psychiatry*, 1969, **126**, 884-888.

Conners, C. K., and Werry, J. S. "Pharmacotherapy of Psychopathology in Children." In H. C. Quay and J. S. Werry (Eds.), *Psyhopathological Disorders of Childhood* (2nd ed.). New York: Wiley, 1979.

Conners, C. K.; Denhoff, E.; Millichap, J. G.; and O'Leary, S. G. "Decisions for Action in Hyperkinesis." *Patient Care*, 1978, **12**, (13), 94-154.

Conrad, W. G.; Dworkin, E. S.; Shai, A.; and Tobiessen, J. E. "Effects of Amphetamine Therapy and Prescriptive Tutoring on the Behavior and Achievement of Lower Class Hyperactive Children." *Journal of Learning Disabilities*, 1971, **4**, 509-517.

Davids, A. "An Objective Instrument for Assessing Hyperkinesis in Children." *Journal of Learning Disabilities*, 1971, **4**, 499-501.

Department of Health, Education, and Welfare. Office of Child Development. *Report of the Conference on the Use of Stimulant Drugs in the Treatment of Behaviorally Disturbed Young School Children*. Washington, D.C.: U.S. Government Printing Office, January, 1971.

Douglas, V. I.; Parry, P.; Marton, P.; and Garson, C. "Assessment of a Cognitive Training Program for Hyperactive Children." *Journal of Abnormal Child Psychology*, 1976, **4**, 389-410.

Feingold, B. *Why Your Child is Hyperactive*. New York: Random House, 1975.

Friedling, C.; and O'Leary, S. G. "Teaching Self-Instruction to Hyperactive Children: A Replication." *Journal of Applied Behavior Analysis*, 1979, **12**, 211-219.

Gittelman-Klein, R.; and Klein, D. F. "Methylphenidate Effects in Learning Disabilities." *Archives of General Psychiatry*, 1976, **33**, 655-664.

Gittelman-Klein, R.; Klein, D. F.; Abikoff, H.; Katz, S.; Gloisten, A. C.; and Kates, W. "Relative Efficacy of Methylphenidate and Behavior Modification in Hyperkinetic Children: An Interim Report" *Journal of Abnormal Child Psychology*, 1976, **4**, 361-379.

Harley, J. P. "Dietary Treatment in Behavioral Disorders." In B. W. Camp (Ed.), *Advances in Behavioral Pediatrics*. Greenwich, Conn.: JAI Press, Inc., in press.

Hoffman, S.; Engelhardt, D. M.; Margolis, R. A.; Polizios, P.; Waizer, J.; and Rosenfeld, T. "Response to Methylphenidate in Low Socioeconomic Hyperactive Children." *Archives of General Psychiatry*, 1974, **30**, 354-359.

Jacob, R. G.; O'Leary, K. D.; and Rosenblad, C. "Formal and Informal Classroom Settings: Effects on Hyperactivity." *Journal of Abnormal Child Psychology*, 1978, **6**, 47-59.

Kent, R. N.; and O'Leary, K. D. "A Controlled Evaluation of Behavior Modification with Conduct Problem Children." *Journal of Consulting and Clinical Psychology*, 1976, **44**, 586-596.

Krager, J.; Safer, D.; and Earhardt, J. "Medication Used to Treat Hyperactive Children: Follow-up Survey Results." *Journal of School Health*, 1979, **49**, 317-321.

Lambert, N. M.; Sandoval, J. H.; and Sassone, D. M. "Multiple Prevalence Estimates of Hyperactivity in School Children and the Rate of Occurrence of Treatment Regimens." *American Journal of Orthopsychiatry*, 1978, **48**, 446-463.

Laufer, M. W. "Long-term Drug Management and Some Follow-up Findings on the Use of Drugs with Minimal Cerebral Syndromes." *Journal of Learning Disabilities*, 1971, **4**, 55-58.

Loney, J.; Langhorne, J. E.; and Paternite, C. S. "An Empirical Basis for Subgrouping the Hyperkinetic/Minimal Brain Dysfunction Syndrome." *Journal of Abnormal Psychology*, 1978, **87**, 431-441.

Maynard, R. "Omaha Pupils Given 'Behavior' Drug." *Washington Post*, June 29, 1970.

Needleman, H. L.; Gunnoe, C.; Leviton, A.; Reed, R.; Peresie, H.; Maher, C. and Barrett, P. "Psychological Performance of Children with Elevated Lead Levels." *The New England Journal of Medicine*, 1979, **300**, 689-695.

O'Leary, K. D. "The Etiology of Hyperactivity." In P. Meazzini (Ed.), *Behavior Theory and Behavior Modification*. Rome: Giunti & Barbera, in press.

5i

O'Leary, K. D.; and O'Leary, S. G. *Classroom Management: The Successful Use of Behavior Modification* (2nd ed.). Elmsford, N.Y.: Pergamon, 1977.

O'Leary, K. D.; Pelham, W. E.; Rosenbaum, A.; and Price, G. H. "Behavioral Treatment of Hyperkinetic Children." *Clinical Pediatrics*, 1976, **15**, 510-515.

O'Leary, S. G.; and Pelham, W. E. "Behavioral Therapy and Withdrawal of Stimulant Medication with Hyperactive Children." *Pediatrics*, 1978, **61**, 211-217.

Pelham, W. E.; Schnedler, R. W.; Bologna, N. C.; and Contreras, J. A. "Behavioral and Stimulant Treatment of Hyperactive Children." Methlphenidate Probes in a Within Subject Design. *Journal of Applied Behavior Anaysis*, in press.

Rapoport, J. L.; Buchsbaum, M. S.; Zahn, T. P.; Weingartner, H.; Ludlow, D.; and Mikkelson, E. J. "Dextroamphetamine: Cognitive and Behavioral Effects in Normal Prepubertal Boys". *Science*, 1978, **199**, 560-563.

Riddle, K. D. and Rapoport, J. L. "A 2 Year Follow-up of 72 Hyperactive Boys". *The Journal of Nervous and Mental Disease*, 1976, **102**, 126-134.

Rie, E. D. and Rie, H. E. "Recall, Retention, and Ritalin." *Journal of Consulting and Clinical Psychology*, 1977, **45**, 967-972.

Roche, A. F.; Lipman, R. S.; Overall, J. E.; and Hung, W. "The Effects of Stimulant Medication on the Growth of Hyperkinetic Children." *Pediatrics*, in press.

Rose. T. L. "The Functional Relationship Between Food Colors and Hyperactivity." *Journal of Applied Behavior Analysis*, 1978, **11**, 1-10.

Rosenbaum, A.; O'Leary, K. D.; and Jacob, R. C. "Behavioral Intervention with Hyperactive Children: Group Consequences as a Supplement to Individual Contingencies." *Behavior Therapy*, 1975, **6**, 315-323.

Ross, D. M. and Ross, S. A. *Hyperactivity: Research, Theory and Action*. New York: Wiley, 1976.

Rutter, M. "Brain Damage Syndromes in Childhood: Concepts and Findings." *Journal of Child Psychology and Psychiatry*, 1977, **18**, 1-20.

Safer, D. J. and Allen, R. P. *Hyperactive Children: Diagnosis and Management*. Baltimore: University Park Press, 1976.

Safer, D.; Allen, R.; and Barr, E. "Depression of Growth in Hyperactive Children on Stimulant Drugs." *New England Journal of Medicine*, 1972, **287**, 217-220.

Satterfield, J. H.; Cantwell, D. P.; and Satterfield, B. T. "Multimodality Treatment." *Archives of General Psychiatry*, 1979, **36**, 965-974.

Schrag, P. "Readin', Writing', (and Druggin')." *The New York Times*, October 19, 1975, p. 13.

Schrag, P. and Divoky, D. *The Myth of the Hyperactive Child*. New York: Pantheon, 1975.

Shetty, T. "Photic Responses in Hyperkinesis of Childhood." *Science*, 1971, **174**, 1356-1357.

Sprague, R. L. and Berger, B. D. "Drug Effects on Learning Performance: Relevance of Animal Research to Pediatric Psychopharmacology." In R. M. Knights and D. J. Bakker (Eds.), *Rehabilitation, Treatment, and Management of Learning Disorders*. University Park, Md.: University Park Press, in press.

Sprague, R. L. and Gadow, K. D. "The Role of the Teacher in Drug Treatment." *School Review*. 1976, **85**, 109-140.

Sprague, R. L. and Sleator, E. K. "Methylphenidate in Hyperkinetic Children: Differences in Dose Effects on Learning and Social Behavior." *Science*, 1977, **198**, 1274-1276.

Stewart, M. A.; Pitts, F. N.; Craig, A. G.; and Dieruf, W. "The Hyperactive Child Syndrome." *American Journal of Orthopsychiatry*, 1966, **36**, 861-867.

Stewart, M. A.; and Olds, S. W. *Raising a Hyperactive Child*. New York: Harper & Row, 1973.

Swanson, J.; Kinsbourne, M.; Roberts, W.; and Zucker, K. "Time-Response Analysis of the Effect of Stimulant Medication on the Learning Ability of Children Referred for Hyperactivity." *Pediatrics*, 1978, **61**, 21-29.

Weinckowski, L. A., and Pardes, H. "National Institute of Mental Health," *Psychotherapy of Depression Collaborative Program*, Division of Extramural Research Programs, Clinical Research Branch, December 1978.

Weiss, G.; Kluger, E.; Danielson, E.; and Elman, M. "Effect of Long-Term Treatment of Hyperactive Children with Methylphenidate." *Canadian Medical Association Journal*, 1975, **112**, 159-165.

Wender, P. H. *Minimal Brain Dysfunction in Children*. New York: Wiley-Interscience, 1971.

Werry, J. S. (Ed.) *Pediatric Psychopharmacology: The Use of Behavior Modifying Drugs in Children*. New York: Brunner/ Mazel, 1978.

Werry, J. S.; Sprague, R. L.; and Cohen, M. N. "Conners' Teacher Rating Scale for Use in Drug Studies with Children—An Empirical Study." *Journal of Abnormal Child Psychology*, 1975, **3**, 217-229.

Whalen, C. K., and Henker, B. (Eds.) *Hyperactive Children: The Social Ecology of Identification and Treatment*. New York: Academic Press, in press.

Whalen, C. K.; Henker, B.; Collins, B. E.; Finck, D.; and Dotemoto, S. "A Social Ecology of Hyperactive Boys: Medication by Situation Interactions." *Journal of Applied Behavioral Analysis*, 1979, **12**, 65-81.

Winett, R. A. and Winkler, R. C. "Current Behavior Modification in the Classroom: Be Still, Be Quiet, Be Docile." *Journal of Applied Behavior Analysis*, 1972, **5**, 499-504.

Winsberg, B. G.; Yepes, L. E.; and Bialer, I. "Pharmacologic Management of Children with Hyperactive/Aggressive/Inattentive Behavior Disorders." *Clinical Pediatrics*, 1976, **15**, 471-477.

Wolraich, M.; Drummond, T.; Salomon, M. K.; O'Brien, M. L.; and Sivage, C. "Effects of Methylphenidate Along and in Combination with Behavior Modifications Procedures on the Behavior and Academic Performance of Hyperactive Children." *Journal of Abnormal Child Psychology*, 1978, **6**, 149-161.

Zukow, P. G.; Zukow, A. H.; and Bentler, P. M. "Rating Scales for the Identification and Treatment of Hyperkinesis." *Journal of Consulting and Clinical Psychology*. 1978, **46**, 213-222.

Use of Behavioral Strategies with Behaviorally Disordered Children and Youth: A Perspective

by Richard L. Simpson and Gary M. Sasso

Richard L. Simpson is an associate professor of special and school psychology at the University of Kansas and the University of Kansas Medical Center. Currently, he is directing a federally funded program to facilitate the integration of severely handicapped children and youth into a public school system. He has also been a teacher of emotionally disturbed children, school psychologist, clinical psychologist, and director of a program for autistic children.

Gray M. Sasso presently is coordinating a federally funded project to integrate severely handicapped pupils into age-appropriate public school buildings. He has also worked as a teacher of autistic children, a behavior specialist for a public school, and a program consultant for a federal project engaged in the development of academic programs for minority students with learning disabilities.

Sasso is currently completing a doctoral degree in the area of emotional disturbance at the University of Kansas.

Emotionally handicapped children and youth are most commonly characterized by patterns of behavioral excess and deficit (Graubard, 1973; Kauffman, 1977). Ross (1974), suggested that children and youth are identified as emotionally disturbed becuase they emit certain behaviors "with a frequency or intensity that authoritative adults in the child's environment judge, under the circumstances, to be either too high or too low." Zabel (1981) made a similar observation, noting that behaviorally disordered pupils "engage in too many inappropriate, disruptive, disagreeable behaviors and too few appropriate, cooperative, agreeable behaviors." Hence, while it cannot be denied that there is a small percentage of school-age children and adolescents with highly aberrant patterns of behavior (e.g., autistic, schizophrenic), most behaviorally disordered pupils are distinguished by socially determined excesses and deficits of relatively normal response patterns.

Since the most prominent feature of behaviorally disordered children is behavioral excesses and deficits, the primary role of educators of these children is to effect appropriate changes in these behavior patterns. Accordingly, even though the precise role and goals of educators of behaviorally disordered children and adolescents may vary as a function of individual philosophical orientations, training experiences, personal values, and other ideosyncratic factors, these professionals are generally responsible for decreasing excesses and ameliorating deficits (Charles, 1981; Pate, 1963; Woody, 1969). In particular, educators of behaviorally disordered pupils must alter their pupils' patterns of behavioral excess and deficit toward approximations of the "norm," as dictated by the cognitive and social standards established by nonexceptional peers (Simpson & Edwards, 1980), and toward increasing their opportunities for personal happiness and societal contribution (Kessler, 1966; Shea, 1978).

While a variety of strategies and procedures exist for assessing the effects of educators' efforts at serving emotionally disturbed children and youth, the basic and ultimate dependent measure of program success must be pupil behavior. Accordingly, irrespective of other changes that may occur concomitantly in behaviorally disordered students (e.g., improvement of self-concept, better understanding of self), educators must be able to demonstrate that their intervention efforts significantly modified these excesses and deficits initially associated with special program placement and that individual pupils are more appropriate for regular class placement as a result of the intervention. Again, in order to be valid, these demonstrations of improvement must be based on overt behavior. As suggested by Kauffman (1979), claims of change "in the face of unaltered overt behavior are not likely to be convincing demonstrations of effective intervention."

Behavior modification represents a particularly effective approach for intervening with behaviorally disordered pupils. This strategy, which involves the application of learning theory principles to change the frequency, rate, and duration of behavioral excesses and deficits, has been successfully employed in a variety of settings and with diverse groups of emotionally handicapped children and youth (Broden, Hall, Dunlap, and Clark 1970; Heaton, Safer, Allen, Spinnato, and Prumo, 1974; Whelan and Haring, 1966). For example, behavior modification has been responsible for decelerating aggressive behavior (Kauffman and Hallahan, 1973; O'Leary and O'Leary, 1976), decreasing social withdrawal (Buell, Stoddard, Harris, and Baer, 1968; Hall and Broden, 1967); increasing academic productivity (Copeland, Brown, and Hall, 1974; Hallahan and Kauffman, 1975); and decreasing problems associated with hyperactivity (Doubros and Daniels, 1966; Reith, 1977).

Further, applied behavioral strategies have been shown to be useful with varying age groups (Peed and Pinsker, 1978; Williams, 1959) and levels of severity (Foxx and Azrin, 1973; Nolen, Kunzelmann, and Haring, 1967;

Simpson and Sasso, 1978). Overall, behavioral strategies have proven to be among the most functional tools available to educators of behaviorally disordered children and youth (Walker, 1979).

Yet, in spite of their proven utility, applied learning theory techniques and procedures have been less than enthusiastically received by all professionals and have, in fact, been viewed by some as an inadequate or inappropriate intervention strategy with exceptional children and youth (Allport, 1955; Bettelheim, 1970; Kelly, 1955; May, 1961; Rogers, 1961; Rogers and Skinner, 1956). Consequently, the use of behavioral procedures in serving the needs of educators of emotionally disturbed pupils remains an issue. This chapter is designed to examine the role of applied behavior analysis procedures in facilitating the education and development of behaviorally disordered pupils.

The Competent and Effective Educator

As suggested earlier, the role of educators, including those of behaviorally disordered pupils, is to facilitate behavior changes. Individuals who are unwilling or unable to accept this basic pedagogical principle are either not being honest with themselves or are naive about their intended professional mission.

In order for educators to be in a position of effectively and positively influencing the behavior of behaviorally disordered children and youth, they must possess the following skills and attributes, including an understanding of their own values, attitudes, interpersonal abilities, and competencies.

Personal Attributes

1. Familiar with own values
2. Enjoys teaching
3. Is able to serve as an appropriate model for children and youth
4. Trusts others
5. Is committed to the profession and to students
6. Is positive and optimistic
7. Is sensitive to the needs of others
8. Is a good listener
9. Has a sense of humor
10. Is willing to try novel teaching approaches, curricula, and ideas
11. Enjoys and trusts self
12. Is honest
13. Is an integrated and actualized person
14. Is open to new experiences and perceptions
15. Is aware of own emotional and psychological needs

Educational Competencies

1. Able to identify and evaluate academic, cognitive, and behavioral strengths, excesses, and deficits
2. Able to establish appropriate educational and behavioral goals for students
3. Able to utilize suitable strategies for achieving educational and behavioral goals
4. Able to measure and evaluate educational and behavioral change
5. Able to utilize evaluative feedback to revise and modify educational and behavioral intervention programs
6. Able to work and interact with other professionals and parents in an effort to effect specific goals with behaviorally disordered children and youth
7. Able to select, sequence, and evaluate curricula and materials designed for behaviorally disordered pupils
8. Able to utilize appropriate techniques and strategies (i.e., a variety of management and control procedures) to effect behavior changes in behaviorally disordered pupils
9. Able to determine when and how a pupil assigned to a program for the behaviorally disordered can be transferred to a less restrictive setting
10. Able to use resources outside the classroom to augment available services to behaviorally disordered pupils
11. Able to understand and utilize basic legal and legislative concepts relevant to the education of behaviorally disordered pupils
12. Able to understand basic terminology and concepts, including causes and dynamics associated with the behavior of behaviorally disordered pupils
13. Able to understand and evaluate ethical issues associated with the education of behaviorally disordered pupils
14. Able to provide a warm, supportive, and structured environment for behaviorally disordered pupils
15. Able to supervise and coordinate the activities of other staff members involved in the education of behaviorally disordered pupils

While the preceding list of characteristics is in no way comprehensive, it does serve to accentuate the point that teachers of behaviorally disordered pupils are truly a "special breed," and that the task to which they are assigned necessitates that they possess a wide variety of skills and attributes. Further, the role of educators of emotionally disturbed children requires that these professionals be able to utilize certain principles associated with an applied behavior analysis model

regardless of their alleged philosophical orientation. That is, effective teachers and other competent educational personnel can be expected to make use of behaviorally related concepts regardless of how they label their method of operation. While appropriate application of behavioral principles requires attention to a number of interpersonal components (e.g., sensitivity to feelings, knowledge of own values), these strategies are nevertheless a *sine qua non* in the repertoire of effective professional personnel. Who would argue, for example, that in order to effectively serve the needs of behaviorally disordered children professionals must be able to analyze antecedent and consequent stimuli and events associated with particular behavioral excesses and deficits; provide good models for educational and social functioning; provide contingent praise for satisfactory performance; and empirically assess the effects of their efforts?

Our position, as expressed in this chapter, is that while not all successful educators of behaviorally disordered children and youth may proclaim themselves to be "behavioralists," they nonetheless must rely on certain basic principles aligned with a behavioral philosophy to be effective in their assigned tasks. Accordingly, while educators must possess a variety of tools, skills, and personal attributes to draw from, they must also recognize that behaviorally related techniques are a basic ingredient in successful functioning. We are not so presumptuous as to suggest 1) that behavioral methodology is the ultimate answer to all problems, 2) that behavioral procedures are more suitable under certain conditions than other treatments, or 3) that there are not potential drawbacks associated with the use of certain techniques. We are, however, convinced that a thorough analysis and understanding of the principles associated with the behavioral model will support our contention that in order to be an effective educator, a person must comprehend and utilize a number of the tenets of applied behavior analysis.

Common Misconceptions about the Behavioral Model

Applied behavioral procedures are neither inherently good nor bad. That is, the technology is nothing more than a potential aid to effective teaching, with all the potential for effective or ineffective use found with any such tool. To be sure, situations and settings exist in which behavioral procedures are misused with detrimental effects to children. However, teachers also misuse more traditional teaching approaches with similar results. Virtually every educational strategy or philosophy has the potential for misuse. The fault, therefore, lies not in the technique itself, but in how it is used.

When behavioral procedures were first introduced into special education settings in the 1960's, several issues attracted a great deal of criticism. Much of this early criticism was founded upon an understanding of operant conditioning in its purest sense, which led to misconceptions as to what genuinely happens in a classroom for emotionally disturbed children staffed by a teacher who utilizes basic behavioral principles. Without any doubt, users of the model apply techniques which are far different from those of the animal researchers who developed many of the original concepts of the approach. This point should be so obvious as to require no mention; however, it has in fact existed as a critical point of misunderstanding and controversy for many opponents of the behavioral approach.

Through the years, many fallacies have remained as elements of the continued criticism of behavioral techniques. Of the most common are those identified below.

The animal trainers. One of the most widespread criticisms of behaviorism revolves around the premise that because animals are trained by manipulating consequences, it is demeaning to use similar techniques with human beings. Much of this criticism stems from seeing a child receiving an "M&M" for successful behavior in much the same way an animal receives food for a trick. This dramatic reminder that each family of organisms has common ties is extremely distressing to some people. Direct one-to-one edible reinforcement, while useful only when applied judiciously, can be effective in teaching children provided the following two basic conditions are present: 1) the student's functional level is so low that direct, immediate approval is necessary to increase the chance that the behavior will occur again; and 2) the student cannot yet respond to more traditional forms of environmental approval or is not yet capable of self-reinforcement.

To further clarify this issue, let us take a look at how society works or, more precisely, what makes people work. The entire economic system is one of rewards for appropriate behavior; the reinforcer being money which can be used to buy goods and services. In this respect, money is a classic **secondary reinforcer**. Token systems in classrooms for disturbed students are also based on the concept of secondary reinforcement. In this sense, behavioral programs are an accurate reflection of the adult world.

The final or criterion goal for educators of disturbed students are children who function appropriately utilizing a self-imposed control system. Of course, educators would be pleased if all disturbed children readily grew to become self-reinforcing. However, the nature of a disturbed child's handicap is such that they often experience difficulty in this area. The child is typically unable to respond to the ordinary cues and limitations placed upon him/her for appropriate social behavior. Therefore, a highly structured program which allows the child to practice correct responses to social situations serves not only as a model but also as a controlled learning program.

The issue of self-reinforcement or self-direction can also be viewed from the standpoint of skill acquisition (Goldfried and Davison, 1978). Disturbed students lack the skills necessary for adequate social functioning. Unlike other approaches geared toward natural unfolding of a child's potential, behaviorism views self-direction as involving certain skills that may effectively be taught by systematic interventions. The disturbed child typically has received little approval for his/her behavior, and will often display behavior which only receives negative attention from others. For these reasons, the child has learned that in order to get attention, she/he must act in an inappropriate manner. The child literally cannot discern between positive and negative disapproval of behavior. The pattern, if

continued over a number of months or years, becomes a habitual means of response. Traditional psychoanalytic programs for children who have built a negative response repertoire stress the need to allow such children to act out their negative feelings without fear of reprisal. However, what we are dealing with here is a response habit. The child needs feedback on his/her behavior in order to change. When designed and implemented correctly, behavioral programs allow the child to practice socially facilitative behaviors and to learn to discriminate between positive and negative attention. The outcome of the process is a child who is able to respond in a socially approved manner and feels better about himself/herself.

Symptom substitution. Treatment of "symptoms" or "underlying causes" has for years been a major point of disagreement between psychoanalytically and behaviorally oriented professionals. One of the issues behind this controversy has been **symptom substitution**. Much of the rhetoric surrounding early behavioral programs centered on the notion that the symptom "is" the neurosis (Eysenck, 1960); unfortunately, some professionals initially took this slogan literally. However, over the years behaviorists have become more interested in and observant about causation in the development of programs, although the positions of the two groups still differ, often radically, on what they regard as the "causes" (Bandura, 1969).

As teachers of disturbed students can attest, treatment effects are not necessarily restricted to the target behavior. Sometimes, although not always, improvement in the target behavior is accompanied by concurrent improvement in other behaviors. Some side effects result in undesirable changes in other behavior. Whether or not such undesirable effects should be referred to as "symptom substitution" is a matter of orientation. As previously noted, side effects may also result in beneficial effects to nontargeted behavior.

Cold and distant teachers. This misrepresentation of teachers who use behavioral strategies is especially unfortunate because it is blatently false. The suggestion that teachers of disturbed children who employ behavioral techniques do not consider the teacher-student relationship important appears to stem from the early work in behavior therapy. Eysenck (1960) believed that behavioral procedures and techniques could stand on their own, therefore, a personal relationship between client and therapist was not necessary. This line of thinking and several other reasons behind this initial attitude, apparently leveled the same criticism at all those utilizing behavioral methods. However, since the first use of behavioral strategies, many other professionals have paid increased attention to the importance of an effective interpersonal relationship for the success of such an intervention plan.

Although considerable reliance upon the techniques is embodied in the teaching process, such programs also contain mechanisms which demand a caring, sympathetic student-teacher relationship if the child is to successfully adapt. Reinforcement procedures, extinction, and even mild punishment techniques, if structured correctly, provide opportunities for genuine praise and feedback regarding problem areas. Teachers of disturbed children quickly learn that the kids know if they care about them and can spot a "fake" almost immediately.

As is often the case with the learning and application of new concepts, teachers who are just learning to carry out behavioral procedures may at first appear stilted and withdrawn from their students. However, these same teachers later realize that a school program for disturbed students has little chance of success without a suitable therapeutic relationship. Behaviorism has provided teachers of disturbed children with a highly effective tool which is readily adaptable to the school setting.

Tough kids require tough measures. This dictum is supported by a number of sources. First, educators advocate strong measures as the only way to combat violent and aggressive behavior in the schools. Thus, we have teachers, consultants, and administrators who are armed with the latest in mildly punishing behavioral contingencies and are eager for a chance to put the techniques to use. The educators are correct; operant procedures **are** highly effective in teaching new behaviors and extinguishing inappropriate actions. But, one of the most important elements in devising a behavioral program is an accurate assessment of the behavior and the type of program which will best serve a given child. A general ethical consideration demands that every possible positive approach be applied to inappropriate behaviors before resorting to stronger contingencies. There are several reasons for this. First, the media's continuous misrepresentation of behavior modification (Turkat & Forehand, 1980) has led to negative reactions among the public. Second, legal issues surrounding the use of specific behavioral techniques demand accurate assessment of the student and the least aversive program. Third, and most important from a teaching standpoint, most disturbed children will respond best to less restrictive positive approaches. The change agent in many classrooms is not the procedure or technique per se, but the consistency with which it is carried out.

A few years ago, a newly graduated master's candidate took over his first classroom of autistic students after just having completed his thesis on overcorrection. Needless to say, the teacher felt that there was not an inapproriate behavior he could not extinguish or a skill he could not teach. One of the students in his classroom exhibited vocal self-stimulation in the form of continuous nonsense syllables and phrases. A first thought was to implement a "hand-over-mouth" procedure which had proven effective in reducing a similar behavior in an autistic child (Newman, Whorton, and Simpson, 1977). Although potentially effective, this procedure was time consuming initially, and involved a degree of isolation during each occurrence of the inappropriate verbalization. The paraprofessional in the classroom, a woman with little experience in working with a severely disturbed population but who did have years of experience as the mother of three children, suggested having the child put a check mark on the blackboard next to his name each time the behavior occurred. The teacher's initial reaction to this proposal was a polite chuckle since he had never read about or seen a procedure resembling it proposed for this type of behavior. However, the "check mark" technique was tried with immediate positive

results. The self-stimulation was completely extinguished within four days and did not return as the procedure was faded.

It must be emphasized that many very simple, nonpunishing procedures are effective with tough kids. Assessment of the behavior must be coupled with knowledge of the current literature, and a personal appraisal of the child and the teaching/behavioral approach which will be most effective.

Insight causes the program to fail. This misconception which continues to be voiced by educators of disturbed students mostly at the secondary level, contains a degree of truth. Standard reinforcement and token systems in which the consequences or rewards are controlled entirely by the teacher sometimes fail because: the student decides that "beating the system" is more reinforcing than the rewards he/she would receive by complying with the program or the structure of the program is not appropriate for the complex needs of older students.

The task of devising workable and facilitative programs for disturbed students can be made easier and more meaningful by including them in the development process. Students will be less interested in undermining a program if they have had a voice in creating it. Whenever possible, goals should be decided in the context not only of teacher judgment, but also student willingness. Consequences for inappropriate behavior can be discussed in the same manner. Often the student will suggest harsher consequences than those considered by the teacher, thus allowing the teacher to be in the enviable position of suggesting less severe contingencies. Students can also be encouraged to keep their own behavior records, which provides immediate feedback and may be helpful in persuading them to "buy" the program.

The most successful teaching techniques for disturbed students at any level are those in which the students, whenever possible, set their own goals and monitor their own progress.

Generalization. In spite of the gains made by behavior analysts over the last ten years in expanding the use of operant techniques, only few empirical reports can be found to support generalization of treatment effects (Kuley, Shemberg, and Carbonell, 1976). Despite warnings that generalization and maintenance of treatment effects can be expected only when programmed (Baer, Wolf, and Risley, 1968), few systematic efforts to plan for or evaluate generalization have been made. Hence, while behavioral technology has advanced to a level at which treatment gains are possible for nearly every behavior and nearly every physical setting, few attempts have been made to extend or transfer these gains to other environments. Because the true test of a treatment lies in its effectiveness in the student's natural surroundings, the issue of generalization will undoubtedly continue to be a challenge for behaviorists (and teachers of behaviorally disordered pupils) in the 1980s (Kazdin et al., 1980).

Initially, generalization was considered to be a passive phenomenon (Stokes and Baer, 1977), something that happened as a result of evoking and reinforcing varying samples of behavior during any one teaching operation; not something produced by procedures specific to it. This view has been reinforced by occasional reports of generalization. Simpson and Swenson (1980) reported significant generalization of treatment effects in an autistic child using a lemon juice punishment process for rumination. Their results suggest that, at least for punishing contingencies, the strength of a punisher may determine the amount of nonprogrammed generalization across environments.

Over the years, strategies have been devised for directly programming generalization in an attempt to determine the most efficacious means of achieving generalization across persons and settings. Two general types of programming appear to be in use with disturbed students at this time. One involves the teaching or shaping of a new behavior into the natural environment. This has been accomplished in a number of different ways by: 1) reteaching a particular behavior in other environments using different teachers or other responses; 2) teaching others to "prompt" the behavior in other surroundings; 3) utilizing a number of people in the teaching process in an attempt to ensure transfer across persons; 4) concurrent training of related skills; 5) using intermittent reinforcement during initial teaching to approximate natural conditions; and 6) direct reinforcement of the generalized behavior when it occurs (Stokes and Baer, 1977).

Another method used to facilitate generalization has been to teach a behavior in the environment in which it would naturally occur, thus eliminating the need for transfer, and teaching the ultimate or criterion behavior rather than shaping similar behaviors which then must generalize to the desired behavior. An example of the latter procedure might be to teach a student to sort socks by color in the context of an overall self-help program rather than teaching block sorting by color, a behavior which must then be translated into a functional, adaptive behavior.

Because generalization does not always occur as a result of direct treatment, programming of some sort must be incorporated into the initial planning stages of any behavioral programs to ensure that students are being taught behaviors which will allow them to successfully interact in as many settings as possible.

Effective Application of Behavorial Principals

Behavioral principles and techniques, independent of the manner in which they are advertised, are consistently used by effective teachers of behaviorally disordered children and youth. Included are reinforcement methods and other techniques for promoting desirable behavior, procedures for extinguishing maladaptive behavior patterns, methods for decelerating behavioral excesses, and procedures for managing behavior through the manipulation of antecedent conditions. Each of these topics will be discussed relative to its role in serving behaviorally disordered pupils.

Methods for promoting desirable behavior. Procedures and techiques for advancing and maintaining adaptive social and academic behavior are acknowledged components of effectual programs for emotionally and behaviorally handicapped pupils. That is, virtually every educator would attest to the

importance to students of praise and approval; a pat on the back, a well-timed smile, a reward for a task well done, or other positive responses. Yet, while there would most likely be little argument about the importance of these methods, it must be emphasized that their relative effectiveness in producing planned behavior changes will vary according to the scientific rigor with which they are applied. For instance, while both lay persons and professionals generally agree on the generalized benefits associated with positive teacher attitudes and behaviors applied behavior analysis proponents would advance the notion, albeit in perhaps somewhat vague terms, that teacher responses, in spite of their alleged value, can only be shown to have a facilitative influence, and thus proven value, when applied and assessed systematically. Thus, rather than suggesting that a particular teacher's positive responses will result in behavioral improvements in all pupils (which they will not), it is assumed that each child or adolescent will react differently and that the only valid method for assessing influence is the employment of proven measurement procedures. Hence, while teachers of behaviorally disordered children must be positive in their pupil interactions, and while these interactions may at times need to be "contingency free," empirically validated changes will come only as a result of adherence to standard behavioral principles. Educators, therefore, must maintain proper perspective on the use of reinforcing methods. That is, while teachers must be encouraged to be positive with their pupils and to concentrate on developing supportive environments, they must also recognize that empirically valid response pattern changes cannot be demonstrated without the use of applied behavior analysis procedures.

Educators in search of procedures for accelerating adaptive responses must also be reminded of the following two general methods for accomplishing this goal. First, teachers can reinforce desired behaviors by following their occurrence with stimulus events which increase the probablity of reoccurence. For example, a child who significantly increases the number of completed assignments when provided tokens which he/she can later exchange for desired items can be assumed to be reinforced by this consequence. Second, behaviors may be accelerated through the systematic removal of aversive stimulus. Thus, if a child who is told that he/she will lose recess if he/she fails to correctly complete a predetermined number of assignments improves his/her classroom productivity, it can be inferred that he/she is reinforced by the system. For obvious reasons, positive reinforcement programs are preferable to negative systems. Although empirically valid, teachers who routinely employ negative reinforcement programs can be expected to have less rapport, poorer interpersonal relationships, and to encounter more students who resist program efforts than those educators who rely on more positive strategies.

Educators have been able to demonstrate success as a result of using reinforcement techniques to manage the behavior of behaviorally disordered children and youth (Drabman & Lahey, 1974; Kaufman & O'Leary, 1972; Peed & Pinsker, 1978). Thus, a discussion of whether or not reinforcement procedures are efficacious is neither relevant nor worthy of attention. What is relevant however, is the manner in which educators best go about selecting the most suitable reinforcement strategy and the manner in which it will be implemented. In particular, it must be emphasized that reinforcement strategies do not exist as entities which are separable from the interpersonal skills of the educators who employ them. That is, educators who fail to establish effective interpersonal relationships with their students, who do not practice effective teaching methods, and who fail to provide suitable curricula for their pupils cannot be expected to produce significant changes in student behavior regardless of how well they make use of behavioral technology. In other words, teacher success in applying behavioral intervention procedures is in direct proportion to other educational skills and to the teacher-student relationship. Educators must realize, therefore, that the behavioral approach is a tool, not a panacea which operates independently of other teaching behaviors. Educators of emotionally handicapped pupils, therefore, must avoid selecting overly potent and rigid programs in an attempt to compensate for other educational deficiencies. Rather, effective use of the behavioral model requires that users carefully assess individuals and available strategies and select those programs which are least restrictive, and which complement other effective teaching methods.

Finally, educators must recognize that the contingent use of reinforcement is neither atypical nor ungenial, but rather reflective of the natural order of the setting in which we live. Educators must accept that behaviorally disordered children and youth will encounter responses from individuals in natural environments in direct relationship to their own behavior. Children who behave politely and appropriately will most likely receive significantly different feedback from individuals in their environments compared to those students who demonstrate antisocial or aberrant behavior. While we are not suggesting that the "nontherapeutic" world correctly consequates behavior, we suggest that necessity of providing realistic feedback to their students. While teachers must provide a warm and accepting setting for their pupils, they must also be able and willing to provide realistic feedback and to utilize reinforcement principles which accelerate specific response patterns.

One reinforcement program used with a ten-year-old behaviorally disordered boy involved a self-graphing procedure in combination with a contingent activity reward. This conduct-disordered student had attended a self-contained behavior disorders class for nearly a year. While he had made significant progress in a number of areas, he had failed to evidence gains in effectively interacting with his peers. In particular, he would frequently make inflammatory and accusing comments about other members of his class (e.g., "Teacher, can I read the copy of *Penthouse* Robbie has hidden in his desk after I finish my work?"; "I don't know why I have such hard stuff to do when you give Jamie baby work"). Needless to say, these constant comments did not put the student on good terms with his classmates and caused numerous fights on the playground. The intervention program employed to

effect a change in this behavior pattern involved both the student and the classroom teacher in independently maintained a count of the frequency of his "appropriate social" remarks. These data were graphed by the child daily. Further, when he was able to meet a predetermined daily goal, the subject was allowed to play a game of his choice with the teacher or paraprofessional. The program significantly increased his appropriate social responses and nearly eliminated all incitive comments.

Extinguishing maladaptive behavior patterns. Extinction programs involve the systematic elimination of reinforcement of behavior patterns for which a child has previously been rewarded. For example, a child who chronically talks out in class without first securing permission might be denied teacher attention as a part of an extinction program. Even though there have been numerous reports of successful extinction programs (Brown and Elliot, 1965; Zimmerman and Zimmerman, 1962), educators must recogize that the use of this approach involves a variety of factors which make its successful implementation difficult. In particular, the effectiveness of the strategy is commensurate with the teacher's ability to identify and control the environmental consequences which control a behavioral excess. As any teacher of behaviorally disordered children or adolescents can attest, this is neither an easy nor a straightforward task. Since it is not unusual for a child's maladaptive behaviors to be maintained by his/her peers, control of these responses must be established if extinction is to occur. Without question, this is a difficult task. Further, failure to gain complete systematic control over these environmental events perpetuating a response may actually serve to further entrench it. In instances where teachers are able to gain only intermittent control over a behavioral excess, they may actually make a behavior more immune to extinction (Mathis, Cotton, and Sechrest, 1970).

An additional issue related to the use of extinction programs for decelerating behavioral excesses and maladaptive responses is that the strategy can be expected initially to result in increases in the targeted behavior pattern. Thus, an adolescent who is placed on an extinction schedule for the purpose of reducing "silly noises" can be expected initially to increase the frequently and/or intensity of this behavior in order to obtain the attention to which he has grown accustomed. In view of such negative side effects which are extremely difficult to ignore, extinction is a dubious intervention choice with certain pupils and behavior patterns.

Finally, teachers of behaviorally disordered pupils must recognize that a number of behavioral excesses and maladaptive patterns simply cannot be ignored due to potential harmful consequences to the subject or individuals around him. Hence, a number of maladaptive behaviors are best dealt with through procedures other than extinction. The ability to make this discrimination is a key to the effective use of the procedure.

The intent of this discussion is not to suggest that extinction programs do not play a role in the management of the behavioral excesses manifested by emotionally disturbed children, but is to further the notion that implementation of programs of this nature must be based on a thorough working knowledge of its strengths and weaknesses. As with other principles of applied behavior analysis, incorrect or unsystematic application of extinction procedures actually aggravate the initial presenting problems.

Notwithstanding the above considerations, numerous reports have demonstrated the effective use of extinction principles. One such program involved a seven-year-old severely emotionally disturbed girl who would routinely have tantrums if her teacher was unable to work with her on a one-to-one basis. In an effort to decrease this behavior, the teacher began to ignore her whenever she had a tantrum. As an accompanying procedure the pupil was provided frequent attention for working independently. Although the program initially resulted in more tantrums, it eventually significantly reduced the pattern. In addition, the child significantly increased her willingness to work independently at her desk.

Manipulating antecedent events. The behavior of disturbed students can be changed or controlled by events and conditions that precede responses as well as by the consequences which follow them. Conditions preceding a behavior, **antecedents**, can act to either set the stage for behavior to occur or to prompt the occurrence of a behavior (Walker, 1979). Antecedents have been found to be as powerful as consequences in controlling behavior, and have been used for years by educators of disturbed students, regardless of their philosophical orientation. Although the word "antecedent" is primarily a behavioral term, Redl and Wineman (1957), two educators who subscribe to a psychoeducational model for teaching disturbed students, described under the heading "preventative planning" techniques which are highly similar to manipulating antecedents. Their procedures include: 1) restructuring the classroom program — abandoning an insufficient activity pattern or classroom structure and substituting one which is matched more carefully to the students; 2) support from routine — providing a classroom program which is predictable and realistic to children's needs; 3) removing seductive objects — physical structuring of the classroom to ensure a nondistracting climate; and 4) hurdle lessons — differential scheduling and programming for each student depending on frustration tolerance.

A classroom can be structured to take advantage of the strength of antecedents in a variety of ways in addition to the general procedures outlined above. In particular, the following can be used to ensure appropriate behavior; providing a definite and dependable classroom routine; expanding from specific and limited tasks to more complex assignments; developing a school atmosphere in which pupils are expected to work; establishing a pattern of returning pupils to their assigned task after an emotional blow-up; planning ahead to anticipate students' needs; and establishing advance expectations. In addition, consistency is a salient factor. That is, besides providing a dependable routine, the teacher must follow through on all stated classroom rules as quickly as possible. It is only when students are sure of their environment that they will be able to make gains toward controlling their own behavior.

A variety of conditions must be guaranteed to create a suitable educational environment for disturbed pupils. For instance, clear and direct rules for listening to instructions assigned can facilitate student ability to perform tasks. These procedures can also serve to eliminate the disruptions that occur when some of the students are not attending while instructions are given.

In the process of changing behavior, the teacher of disturbed students should examine all possible antecedents before resorting to the manipulation of consequences. There are many advantages to such an approach. If changing an antecedent results in more appropriate student behavior, the behavior change is likely to be permanent as long as the antecedent condition remains in effect. In addition, once the change has been made, the teacher no longer has to worry about it (Walker, 1979). That is, the personal response cost to the teacher required to change the student's behavior is low when dealing with antecedents.

While the manipulation of antecedent conditions such as those discussed can be described as behaviorally related tools, they must also be recognized as generic components of effective education. Structuring tasks and the physical setting itself is basic to any good educational program.

Punishment procedures. The use of punishing contingencies with disturbed students is surrounded by professional controversy and several ethical considerations. Since punishment has continued to be a part of programs for disturbed students, a general overview of how punishment works and the controversy surrounding it may serve to clarify the issue.

Punishment has been defined by Becker et al. (1971) as the presentation of aversive stimuli (physical punishment) or the withdrawal of reinforcement (deprivation of privileges or isolation from people). It has been shown to be as effective as reinforcement in producing strong and lasting behavior effects. However, this does not mean that punishment should automatically be used. Certain moral, ethical, and legal issues must be considered before punishing contingencies should be implemented. One side of the moral issue is represented by those who insist that punishing contingencies should not be used under any circumstances and argue that much of the disturbed student's nonadaptive behavior stems from uncaring treatment of others or a deprived environment.

On the other side of the moral issue concerning punishment are those who feel that when the long-term effects of using punishment are far more beneficial than the effects of not using it, the moral person will do what is best for the child and use punishment (Becker et al., 1971).

Consider this example:

A mother had a child in the home who was very demanding and when it did not get his way, the result was tantrums and aggressive behavior toward other family members. The relationship between the child and the other members of the family had deteriorated to the extent that the child made constant demands followed by inappropriate behavior. The mother, in an attempt to control the tantrum behavior, placed the child in his room with the door closed for five minutes each time the inappropriate behavior occurred. As a result of this procedure, the tantrum and aggressive behaviors were eliminated, and a more positive relationship with the family was possible.

The above example is cited as an instance of the effective use of a punishing contingency; in this case, "time-out." The rationale is that it is immoral not to help disturbed students learn to live effectively.

The issues surrounding the use of punishment are far from being resolved, but a few general guidelines for use of the strategy can be stated. First, punishing contingencies should be considered only after all positive approaches have been exhausted. Even with the most extreme or bizarre inappropriate behaviors, positive reinforcement will often be effective. Second, punishment may be considered a possible intervention in situations where the behavior is so frequent that there is little or no incompatible behavior to reinforce. Third, punishment should be considered if the student's behavior is so intense that someone might get hurt, including the student himself. Examples of this include various self-stimulatory and self-destructive behaviors such as head banging in which the possibility of severe injury is apparent.

Although punishing contingencies can be very effective in limited situations, certain precautions must be taken to ensure that the techniques are successful and produce the maximum positive benefit for the student. Punishment acts to create a situation in which the student avoids the inappropriate behavior because it has become associated with a punishing consequence. But in some instances, the student will learn instead to avoid the person administering the consequence. To minimize this possibility the teacher can pair the punishing contingency with a strong positive reinforcer for an appropriate behavior which is incompatible with the punished behavior. Whenever possible, the teacher must make it clear to the child which acceptable behaviors will be reinforced. In addition, the punisher should be administered by all those who work with the student to prevent the punishment from generalizing to one adult.

Despite all the disadvantages and precautions related to the use of punishment, the following advantages should also be noted. First, punishment works quickly in comparison to positive reinforcement procedures (if a punishing contingency has not shown a degree of effectiveness within four or five days, the procedure should be discontinued). Because it works so quickly, the response cost to the teacher, although high during the first days of consistent implementation, will thereafter be very low because the inappropriate behavior will have been extinguished or will occur at a much lower rate.

One punishment program used with a nine-year-old, autistic-like boy involved the use of a mildly aversive contingency in the treatment of a chronic, highly individualized self-stimulatory behavior (Simpson & Sasso, 1978). This student had been in a number of institutions prior to entering a public school program for severely disturbed children. Although the child evidenced deficits in many social and academic areas, the behavior of greatest immediate concern to his teacher was a habitual pattern of vomiting into the oral

cavity followed by reconsumption of the vomitus, a behavior known as rumination. This behavior often has severe consequences for children and in some cases has resulted in life-threatening situations due to the loss of food. The child's records from previous placements suggested that none of the procedures implemented in the past had been successful in effecting a significant reduction in the behavior. Following a behavioral assessment of the student, it was decided to attempt a mild punishing strategy paired with positive reinforcement of appropriate, nonruminative behavior. The procedure involved the introduction of small amounts of lemon juice into the child's mouth each time the rumination behavior occurred, followed by a restitution process of cleaning the lips and areas around the mouth. The procedure proved to be highly successful and illustrates the advantages of the use of punishing techniques. During the first day of treatment, the procedure was very time-consuming for the teacher. However, because the frequency of the rumination behavior decreased to nearly zero by the second day, little time was required for direct contact. Additionally, the teacher and paraprofessional found that more time could be spent reinforcing the child's adaptive behaviors.

The use of punishment, despite moral, ethical, and legal considerations, continues to be used by public school personnel, most notably in the area of autism. If used properly and sparingly, it can be a useful tool in helping students effectively change their behavior.

Discussion

Our intent in this article has been to promote the concept that even though behavioral principles are not universally applicable to all problems presented by behaviorally disordered children and youth, the approach is extremely compatible with a number of effective teaching procedures. Further, the model is compatible with the notion that the primary function of educators is to effect changes in the academic and social behavior of their pupils. To the extent that the systematic analysis and measurement of behavior is a part of effective teaching, capacity to estimate the stimuli controlling overt responses and the ability to manipulate environmental conditions to achieve specified goals, behavioral principles must be given appropriate consideration.

Yet, in spite of their proven effectiveness, applied behavior analysis procedures cannot be used indiscriminately or without consideration of the argument that they may not always be the preferred intervention choice. While analysis and evaluation of problems, settings, and treatment effects should be a part of any educational effort, it must be understood that the preferred intervention strategy may not always be the manipulation of an environmental consequence. Further, even when the systematic manipulation of antecedent or consequent events is the preferred alternative, numerous other factors must also be considered. First, educators of behaviorally disordered pupils must guard against excessive reliance on punishers, negative reinforcement paradigms, and similar types of intervention procedures. While punishment contingencies have an appropriate role and function in the education of exceptional pupils, their use must be restricted to situations in which other intervention strategies have proven unsuccessful, and where the nature of the behavioral excess warrants such measures. Second, as a rule of thumb, the most positive and least restrictive approach must always be employed first. If necessary, other measures are then considered following careful evaluation.

Professionals must be willing to consider a variety of variables, including those outside the boundaries of traditional applied behavior analysis. Educators must not think that they can produce planned behavioral changes without first having thoroughly analyzed situations to assess 1) whether or not a child or youth is developmentally capable of making a desired response; 2) whether or not curriculum and suitable teaching efforts have been utilized prior to the consideration of behavioral intervention procedures; 3) whether or not the resources, including time, are available for successfully conducting a given behavioral program; and 4) whether or not cooperation both from administrators and practitioners is available to successfully to implement and maintain a project.

Finally, educators must develop well-established goals and objectives for their pupils as well as carefully considered strategies for achieving these goals. Behavorial techniques and procedures, along with other educational and therapeutic choices, must be orchestrated and coordinated consistently in order to avoid program fragmentation and confusion of both pupils and staff. Efforts must be made to assure that long-range goals are clearly established and that program efforts, including the use of behavioral principles, are in line with such efforts. For example, a child for whom increased social interaction is an ultimate goal should probably not be exposed to a program - behavioral or otherwise - to decrease his seeking permission from his classroom teacher to talk with a "new friend" during class. Thus, planned program efforts must be established so as to facilitate consistency and coordinated efforts.

In summary, it has been our intent to promote the notion that while all teachers of emotionally disturbed children and youth may not be behavioralists, all good teachers must rely on certain behaviorally related concepts. Without appropriate consideration of this tool, educators will be denying themselves access to a potentially beneficial resource.

References

Allport, G. W. *Becoming*. New Haven, Conn.: Yale press, 1955.

Baer, D. M.; Wolf, M. M.; and Risley, T. R. "Some Current Dimensions of Applied Behavior Analysis." *Journal of Applied Behavior Analysis*, 1968, **1**, 91-97.

Bandura, A. *Principles of Behavior Modification*. New York: Holt, Rinehart, and Winston, 1969.

Becker, W. C.; Engelman, S.; and Thomas, D. R. *Teaching: Course in Applied Psychology*. Chicago: Science Research Associates, Inc., 1971.

Bettelheim, B. *Listening to Children.* Presented at a symposium on educating the emotionally disturbed: Theory to practice. Kansas City, Kansas, 1970.

Broden, M.; Hall, R. V.; Dunlap, A.; and Clark, R. "Effects of Teacher Attention and a Token Reinforcement System in a Junior High School Special Education Class." *Exceptional Children,* 1970, **36**, 341-349.

Brown, P. and Elliot, R. "Control of Aggression in a Nursery School Class." *Journal of Experimental Child Psychology,* 1965, **2**, 103-107.

Buell, J.; Stoddard, P.; Harris, F.; and Baer, D. "Collateral Social Development Accompanying Reinforcement of Outdoor Play in a Preschool Child." *Journal of Applied Behavior Analysis,* 1968, **1**, 167-174.

Copeland, R. E.; Brown, R. C.; and Hall, R. V. "The Effect of Principal-Implemented Techniques on the Behavior of Pupils." *Journal of Applied Behavior Analysis,* 1974, **7**, 77-86.

Charles, C. M. *Building Classroom Discipline.* New York: Longman, 1981.

Doubros, S. G. and Daniels, G. J. "An Experimental Approach to the Reduction of Overactive Behavior." *Behavioral Research and Therapy,* 1966, **4**, 251-258.

Drabman, K. S. and Lahey, B. B. "Feedback in Classroom Behavior Modification: Effects on the Target and Her Classmates." *Journal of Applied Behavior Analysis,* 1974, **7**, 591-598.

Eysenck, H. J. (Ed.). *Behavior Therapy and the Neuroses.* New York: Pergamon, 1960.

Foxx, R. M. and Azrin, N. H. "The Elimination of Autistic Self-Stimulatory Behavior by Overcorrection." *Journal of Applied Behavior Analysis,* 1973, **6**, 1-14.

Goldfried, M. R. and Davison, G. C. *Clinical Behavior Therapy.* New York: Holt, Rinehart, and Winston, 1978.

Graubard, P. S. "Children with Behavioral Disabilities." In L. M. Dunn (Ed.), *Exceptional Children in the Schools: Special Education in Transition* (2nd ed.). New York: Holt, Rinehart, and Winston, 1973.

Hall, R. V. and Broden, M. "Behavior Changes in Brain Injured Children Through Social Reinforcement." *Journal of Experimental Child Psyhchology,* 1967, **5**, 463-470.

Hallahan, D. P. and Kauffman, J. M. "Research on the Education of Distractible and Hyperactive Children." In W. M. Cruickshan and D. P. Hallahan (Eds.), *Perceptual and Learning Disabilities in Children* (vol. 2). Syracuse, New York: Syracuse University Press, 1975.

Heaton, R. S.; Safer, D. J.; Allen, R. P.; Spinnato, N. C.; and Prumo, F. M. "A Motivational Environment for Behaviorally Deviant Junior High School Students." *Journal of Abnormal Child Psychology,* 1974, **4**, 263-273.

Kauffman, J. M. "An Historical Perspective on Disordered Behavior and an Alternative Conceptualization of Exceptionality." In F. H. Wood and K. C. Lakin (Eds.), *Disturbing, Disordered or Disturbed? Perspectives on the Definition of Problem Behavior in Educational Settings.* Minneapolis: Advanced Training Institute, 1979.

Kauffman, J. M. *Characteristics of Children's Behavior Disorders.* Columbus, Ohio: Charles E. Merrill, 1977.

Kauffman, J. M. and Hallahan, D. P. "Control of Rough Physical Behavior Using Novel Contingencies and Directive Teaching." *Perceptual and Motor Skills,* 1973, **66**, 1225-1226.

Kaufman, K. E. and O'Leary, K. D. "Reward, Cost and Self-Evaluation Procedures for Disruptive Adolescents in a Psychiatric Hospital School." *Journal of Applied Behavior Analysis,* 1972, **5**, 293-318.

Kazdin, A. E. and Hersen, M. "The Current Status of Behavior Therapy." *Behavior Modification,* 1980, **4**, 283-302.

Kessler, J. W. *Psychopathology of Childhood.* Englewood Cliffs, N.J.: Prentice-Hall, 1966.

Kelly, G. A. *The Psychology of Personal Constructs.* New York: Norton, 1955.

Kuley, S. M., Shemberg, K. M., and Carbonnel, J. "Operant Clinical Intervention: Behavior Management or Beyond? Where are the Data?" *Behavior Therapy,* 1976, **7**, 292-305.

Mathis, B. C.; Cotton, J. W.; and Sechrest, L. *Psychological Foundations of Education.* New York: Academic Press, 1970.

May, R. "The Emergence of Existential Psychology." In R. May (Ed.), *Existential Psychology.* New York: Random House, 1961.

Newman, R.; Whorton, D.; and Simpson, R. "The Modification of Self-Stimulatory Verbalizations in an Austistic Child." *AASEPH Review,* 1977, **2**(3), 157-163.

Nolen, P.; Kunzelmann, H.; and Haring, N. "Behavioral Modification in a Junior High Learning Disabilities Classroom." *Exceptional Children,* 1967, **34**, 163-169.

O'Leary, K. D. and O'Leary, S. G. "Behavior Modification in the School." In H. Leitenberg (Ed.), *Handbook of Behavior Modification and Therapy.* Englewood Cliffs, N.J.: Prentice-Hall, 1976.

Pate, J. E. "Emotionally Disturbed and Socially Maladjusted Children." In L. M. Dunn (Ed.), *Exceptional Children in the Schools.* New York: Holt, Riehart, and Winston, 1963.

Peed, S. and Pinsker, M. A. "Behavior Change Procedures in Junior and Senior High School." *Education and Urban Society,* 1978, **10**, 501-520.

Redl, R. and Wineman, D. *The Aggressive Child.* New York: The Free Press, 1957.

Reith, H. J. "A Behavioral Approach to the Management of Hyperactive Behavior." In M. J. Fine (Ed.), *Principles and Techniques of Intervention with Hyperactive Children.* New York: Academic Press, 1978.

Rogers, C. "Two Divergent Trends." In R. May (Ed.), *Existential Psychology.* New York: Random House, 1962.

Rogers, C. and Skinner, B. F. "Some Issues Concerning the Control of Human Behavior." *Science,* 1956, 124, 1057-1065.

Ross, A. D. *Psychological Disorders of Children: A Behavioral Approach to Theory, Research and Therapy.* New York: McGraw-Hill, 1974.

Shea, T. M. *Teaching Children and Youth with Behavior Disorders.* St. Louis: Mosby, 1978.

Simpson, R. L., and Edwards, L. L. "Mainstreaming Behavior Disordered Students: A Perspective." *Journal of Research and Development in Education*, 1980, **13**(4), 58-73.

Simpson, R. L. and Sasso, G. M. "The Modification of Rumination in a Severely Emotionally Disturbed Child Through an Overcorrection Procedure." *AAESPH Review*, 1978, **3**, 195-250.

Simpson, R. and Swenson, C. "The Effects and Side-Effects of an Overcorrection Procedure Applied by Parents of Severely Emotionally Disturbed Children in a Home Environment." *Behavioral Disorders*, 1980, **5**(2), 79-85.

Stokes, T. F. and Baer, D. M. "An Implicit Technology of Generalizations." *Journal of Applied Behavior Analysis*, 1977, **10**(2), 349-367.

Turkat, D. I. and Forehand, R. "Critical Issues in Behavior Therapy." *Behavior Modification*, 1980, **4**(4), 445-464.

Walker, H. M. *The Acting-Out Child: Coping with Classroom Disruption*. Boston: Allyn and Bacon, 1979.

Whelan, R. S. and Haring, N. G. "Modification and Maintenance of Behavior Through Systematic Application of Consequences." *Exceptional Children*, 1966, **32**, 281-289.

Williams, C. D. "The Elimination of Tantrum Behavior by Extinction Procedures." *Journal of Abnormal and Social Psychology*, 1959, **59**, 269.

Woody, R. H. *Behavioral Problem Children in the Schools: Recognition, Diagnosis and Behavioral Modification*. New York: Appleton-Century-Crofts, 1969.

Zabel, R. H. "Behavioral Approaches to Behavior Management." In G. Brown, R. L. McDowell, and J. Smith (Eds.), *Educating Adolescents with Behavior Disorders*. Columbus, Ohio: Charles C. Merrill, 1981.

Zimmerman, E. H. and Zimmerman, J. "The Alteration of Behavior in a Special Classroom Situation." *Journal of the Experimental Analysis of Behavior*, 1962, **5**, 59-60.

Interpersonal Skill Training with Young Behaviorally Disordered Children

by Phillip S. Strain and Mary Margaret Kerr

Phillip S. Strain is associate professor of psychiatry and special education in the Department of Psychiatry, Western Psychiatric Institute and Clinic, University of Pittsburgh School of Medicine. Strain is co-director of the Mellon Learning Center which deals with adjustment problems of children in grades K-3. He is also director of a U.S. Office of Special Education funded program which has set up a preschool for teaching autistic-like and normally developing children to help each other learn. Strain is the author of *The Utilization of Classroom Peers as Behavior Change Agents* which was recently published.

Mary Margaret Kerr is co-director of the Mellon Learning Center and assistant professor of psychiatry and special education at the Western Psychiatry Institute and Clinic of the University of Pittsburgh School of Medicine. She is actively involved in research on the study of children's social skills and directs a school consultation program in the Pittsburgh Public Schools. She has recently completed a textbook with C. Michael Nelson entitled *Strategies for Managing Behavior Problems.*

Work on this paper was supported by a grant from the Richard King Mellon Foundation, Pennsylania. The authors wish to acknowledge Kathleen Edward's superb clerical skills in the preparation of this manuscript.

As professionals working with behaviorally disordered children, one of our most difficult tasks is teaching youngsters to get along with one another, to enjoy each other's company, and to be sensitive and responsive to the actions of others. Instruction in these interpersonal competencies has been popularized in recent years under such titles as social skills training, affective education, and social-emotional education. However, the vital role of interpersonal competencies in the educational process was heralded over 70 years ago by Edward Thorndike:

> "The guidance of social and emotional development is properly *the* major concern of education. . . only an emotional commitment in students can lead to maximized intellectual and cognitive growth." (1906, p. 3)

In terms of the special and regular education establishments, a number of related events have transpired since Thorndike's challenge. First, there has been a long procession of glittering statements about the importance of interpersonal skill training in schools and an equal quantity of ominous threats about its continued omission from the curriculum. Some of the statements merit repeating here, if for no other reason, because of their prose quality. For example, the American educational system has been accused of producing "intellectual half-men" and "intellectual giants and emotional midgets" and promoting "a valueless society made up of devalued and devaluing members." Alas, these flowery prose, no matter how sincerely inspired, have not resulted in any apparent change in the available curricula for children with interpersonal skill deficits.

The second major event in the evolution of interpersonal skill training has been the emergence of a few educational folk heroes — guiding the way to new educational frontiers in the affective domain. Their names are recognized widely. Weinstein, Fantini, Ellis, Kozol, Leonard, Kohl, and Buscaglia are some of the more notable players. Like most folk heroes, their legend, and in this case, their curricula have been based largely on folklore. What we have available today for classroom teachers from the "affective education" movement is:

a) **Vaguely worded advice**, often couched in jargon such as, "Let children be free to grow and experience;" "Remember, the key to teaching is mutual respect;" and, "Understanding and love, that's what makes good teaching and good teachers."

b) **Intrapsychic-based psychotherapy**, in which teachers are to help troubled children come to grips with their emotional conflicts, past traumatic history, and current-day stress.

c) **Curricula with no developmental or logical sequence**, a fact that should not come as a surprise in light of points a and b above.

d) **Laments from affective educators** that their domain is far too slippery and complex to measure scientifically and study in a traditional empirical fashion. Regrettably, many people have been convinced that the outcomes of affective education cannot, even should not, be assessed unambiguously. As a *direct result* of a self-imposed assessment hiatus, the affective education movement has doomed itself to extinction in the 1980's mentality of program accountability and cost-effectiveness.

The third major event that has transpired since Thorndike and his famed puzzle box is the movement of behavioral psychologists from the "Skinner box" to the arena of interpersonal skill training. Thus, we have the translation of loosely defined curriculum objectives such as "friendliness" and "humanitarianism" into discrete events such as smiles, providing physical assistance, sharing, and offering verbal compliments. Moreover, a well-established behavioral technology (teaching techniques) has been established to develop

these specific behaviors and to reduce the occurrence of such unsavory, affective-laden behaviors such as verbal and physical aggression, teasing, destroying property, and throwing tantrums.

In the remainder of this paper we would like to describe one application of behavioral technology to the training of interpersonal skills. Specifically, the development of peer social skills with young, severely handicapped children will be the focus of the following questions: 1) whom to teach; 2) what to teach; and, c) how to teach. The burgeoning field of behavioral-based interpersonal skills development is far too broad for a comprehensive discussion in this format; however, at the conclusion of this paper, we have included a topical reference list that covers the full range of behavioral interventions, relevant behavioral targets, and client groups.

Before discussing each of the questions listed above, it is important to specify what advantages and limitations are associated with a behavioral approach to interpersonal skill instruction.

Advantages and Limitations of the Behavioral Approach

A number of defining characteristics of the behavioral approach to instruction make it particularly suitable to the training of interpersonal competencies. Specifically we are referring to the following characteristics: 1) precise and intensive measurement of behavior, and 2) careful analysis of events and behaviors that co-occur with the targets of intervention.

Precise and Intensive Measurement of Behavior

As mentioned earlier, there is a rather well-entrenched professional faction that has argued that interpersonal skills are beyond the realm of precise measurement and that attempts at direct assessment only distort the phenomena under study. There are two very different elements to this argument; one, interpersonal skills are very complex, and two, the measurement of interpersonal skills is somehow intrusive and therefore children behave atypically when they are the objects of assessment. The complexity argument is perfectly valid, the intrusiveness one is patently false.

Because interpersonal skills are so complex, it is necessary that their assessment and training be grounded in a measurement methodology that ensures unambiguous analysis. Agreement between observers (i.e., two or more persons agree that they see the same interpersonal skills at the same point in time) is essential, particularly when we are concerned with competencies that are open to multiple interpretations. Of course, the development of observational systems that can produce close agreement between observers is a long-standing tradition in the behavioral approach to instruction.

Unambiguous measurement first becomes critical to the classroom teacher at the level of IEP development. If the curricular goals and objectives related to interpersonal skills cannot be precisely defined and measured, the IEP cannot be faithfully implemented or evaluated. The system is thus out of compliance with PL 94-142; and more seriously, it is very doubtful that good instruction can follow on the heels of ill-defined objectives.

Table 1 (pages 61 and 62) offers some examples of interpersonal skill definitions found in applied research studies.

In addition to their complexity, interpersonal skills present a significant measurement challenge due to the extreme variability in the performance of skills across days and settings. Therefore, brief and few behavior samples are difficult to interpret because of the notorious instability of social behavior. We know, for example, that a host of subtle environmental events can have a profound impact on the daily rate, duration, and complexity of social behavior. An abbreviated list of these "controlling" events include: 1) number and kinds of toys available, 2) sex and developmental level of children available for interaction, 3) teacher proximity, 4) density of children in the environment, 5) teacher's instructions to play together, and 6) availability of designated play areas (e.g., doll corner, dress-up area, kitchen area). In classroom settings, the control of these events is not logistically feasible and probably not desirable if one wants to know the level and type of interpersonal skills produced in a **noncontrived** setting. Given the unpredictable influence of the above-mentioned events, multiple behavior samples, distributed across several consecutive days, must be used to ensure the representativeness of the data. For classroom assessment purposes, the intensive (daily) measurement of target skills associated with the behavioral approach is well-suited to understanding fully children's interpersonal skills.

Careful Analysis of Co-Occuring Events and Behaviors

One thing that we can affirm with much confidence is that children's interpersonal skills are influenced greatly by the social context of assessment. That is, the amount and quality of observed skills can range widely with the social responsiveness or "supports" available in any particular setting. For example, any assessment of a behaviorally disordered child's interpersonal skills in settings populated exclusively by handicapped children will invariably result in underestimations of competence. Where available social partners are not generally responsive to peers, the assessment of interpersonal skills is a bit like measuring telephone answering behavior in a setting devoid of telephones.

Because the behavior of social partners so directly affects target children's interpersonal skills, it is necessary to collect data on specific behaviors as they occur as "initiated" or "responded" events in an interaction sequence. Previously, we and other behavioral researchers have demonstrated the validity of the following definitions for initiated and responded events:

Initiated - the target child or an interacting peer emits any of the predesignated behaviors (for example, as in Table 1) either three seconds **before** or **after** another child's social behavior.

Responded - the target child or an interacting peer emits any of the predesignated behaviors (for example, as in Table 1) **within**

Table 1: Sample Definitions of Socially Isolate and Cooperative Behaviors

Author(s)	Behavior Category	Definition
Dy, Strain, Fullerton, and Stowitschek (1981)	Motor-Gestural	• This included all positive physical contacts such as brushing another person's arm while reaching for something; cooperative use of an object such as looking at a book with another person, exchanging pens, taking turns placing puzzle pieces; touching and/or manipulating the same object or parts of the same object; all other gestural movement directed to another person such as handing an object, pointing, motioning to "Come" or "Go away," shaking head to indicate "Yes" or "No," and waving.
	Vocal-Verbal	• This included all positive vocal expressions or verbalizations which by virtue of content (e.g., "Hey you," "Uh-huh" [while nodding]) clearly indicated that the person was directing the utterance to another individual.
Gable, Hendrickson, and Strain (1978)	Approach Gestures	• This consisted of any deliberate behavior of the child which involved the hand(s), arm(s), or other body parts in a motion directed to another child (e.g., an inward circular hand and arm motion, repeated bending and straightening of forefinger while arm extended towards a peer).
	Positive Physical Contact	• This consisted of any deliberate behavior which brought the hand(s), arm(s), feet, or other parts of the body into direct physical contact with another child in a positive manner (e.g., a soft touch, a pat, a hug, stroking or grasping-shaking hands, in a positive manner).
	Cooperative Play	• This consisted of any discrete interactive pattern engaged in by two or more children (e.g., mutual playing and/or physically interacting with the same object or materials, or set of objects materials with a common purpose).
Ragland, Kerr, and Strain (1981)	Ball Play	• This included the following motor behaviors: passing a ball to a peer and catching a ball thrown by a peer.
	Physical Assistance	• This included helping a peer onto and off some climbing apparatus.
Strain, and Ezzell (1978)	Social Isolation	• This included sitting idly in a secluded part of a room, ignoring social initiations by peers and adults, remaining on the periphery of a group, and physical withdrawal from strangers.
Strain, Shores, and Kerr (1976)	Motor-Gestural	• This included all movements emitted that cause a child's head, arms, or feet to come into direct contact with the body of another child; that involve waving or extending arms directly toward another child; or that involve placing of hands directly upon a material, toy, or other movable apparatus that is being touched or manipulated by another child.

Table 1 continued. . .

Author(s)	Behavior Category	Definition
	→ Positive	→ • This included touching with hand or hands, hugging, holding hands, kissing, waving, and all cooperative responses involved with sharing a toy or material.
	→ Negative	→ • This included hitting, pinching, kicking, butting with head, "nonplaying" pushing or pulling, grabbing an object from another child, and destroying a construction of another child.
	Vocal-Verbal	• This included all vocalizations emitted while a child is directly facing any other child within a radius of 0.9 m or all vocalizations that by virtue of content (e.g., proper name, "Hey you," etc.) and/or accompanying motor-gestural movements (e.g., waving, pointing) clearly indicate that the child is directing the utterance to another child within or beyond a 0.9 m radius.
	→ Positive	→ • This included all vocalizations directed toward another child excluding screams, shouts, cries, whines, or other utterances that are accompanied by gestures that indicate rejecting, oppositing behavior.
	→ Negative	→ • This included screams, shouts, cries, whines, or other utterances that are accompanied by gestures that indicate rejecting, opposing behavior.

three seconds following another child's social behavior.

By assessing target skills according to their distribution as initiated or responded events, classroom teachers can answer the following vital questions regarding initial skill assessment and intervention effects:

a) To what extent do peers respond in a positive fashion to the social initiations of target children?
b) To what extent do peers initiate positive contact with target children?
c) To what extent do target children respond in a positive fashion to the social initiations of peers?
d) To what extent do target children initiate positive contact with peers?
e) Are patterns of social contact more reciprocal (i.e., initiations typically are followed by positive responses) following intervention?

Limitations of the Behavioral Approach

With few exceptions, behavioral interventions for improving children's interpersonal skills have yet to produce other than transient, setting-specific behavior change. Moreover, it has become clear that promoting substantial increases in the frequency of children's globally-defined social behaviors cannot be equated with making the social interactions of target youngsters "look like" or "function like" those of nonhandicapped peers. Finally, we have found (via sequential analysis of observational data) that adult behaviors such as prompting and reinforcing events in treatment studies, and in the more natural course of events, can both increase **and** limit the amount, duration, and complexity of interaction between children.

While this summary is not overly encouraging, it is possible to pinpont a number of conceptual and assessment limitations that very likely contributed to the current efficacy of treatments.

First, early efforts to improve children's interpersonal skills promoted an approach that led to the application of behavioral technologies prior to a full understanding of what competent behavior was in the first place. Even in its best understood and dissected form, behavioral procedures will never be more than a cluster of teaching tactics to be applied to a sequence of target behaviors. It is ironic that the sequence of behavior, logically the foundation of sciences dealing with the analysis of behavior, would be so little understood. Previously, it was suggested that failures to effectively teach social skills were a function of faculty procedures. While that may be the case, it is also likely that the *a priori* selection of treatment targets has resulted in: 1) the inadvertant

choice of nonfunctional behavioral targets; and/or, 2) the choice of treatment targets that have essential behavioral prerequisites, behavioral prerequisites that are **not** included in the intervention program.

Second, earlier research promoted a rather narrow conceptualization of interpersonal behavior as a bundle of operant responses with obvious antecedents and consequences. Although antecedents and consequences may be there, no one using interaction data as the units of measurement has yet found them. Notwithstanding the apparent absence of clearly identifiable antecedents and consequences, an array of antecedents (verbal prompts, physical prompts, instructions) and consequences (praise statements, token reinforcement, edibles) have been applied to discrete behaviors with the predictable outcome — short, discrete interaction episodes that bear little resemblance to nontrained interaction patterns.

Third, the behavior modification literature in general has emphasized singular solutions to what is an exceedingly complex phenomenon. The poorly developed skills of behaviorally disordered children can emerge and be maintained by a variety of biological, interpersonal, and environmental events. Some children may have suffered such a profound insult to their central nervous systems that they cannot readily engage in those basic social exchange behaviors (e.g., passing a toy, praising another's efforts, greeting a friend) that comprise social interactions. At the other end of the etiological continuum, children may be neurologically intact, but because of their classification as handicapped they become the objects of verbal abuse, scapegoating, and social rejection among their peers. Of course, overt rejection and abusiveness often set into motion a vicious cycle in which the victims of negative stereotypes engage in retaliatory behavior, which in turn makes them even less accepted. Against this complex background of skill deficits interacting with peer rejection it should not be too surprising that interventions focused **exclusively** on skill building are less than a complete success.

Whom To Teach

For many teachers of behaviorally disordered children, the answer to the question above is very simple - everyone! Clearly, most children with severe behavioral disorders (e.g., autistic-like behaviors) are, by definition, handicapped by their poor interpersonal skills. Moreover, children who are chronically-disruptive (conduct disordered in psychiatric jargon) may uniformly engage in maladaptive kinds and levels of interpersonal behaviors. Thus, in settings populated exclusively by behaviorally disordered children, fine discrimination is hardly needed to determine who might be in need of interpersonal skill training.

Other instructional contexts and populations do demand careful attention to the question, "Whom to Teach?" If we examine most of the treatment or intervention literature in the social skill domain, it is evident that **most** children participated because a teacher or parent said they needed such an experience. This **nomination method** is obviously cost-effective, but we do not know the types or degrees of error associated with this screening approach. We suspect, however, that quiet, shy children who are not also behavior management problems in the class may go undetected and untreated. And we do know for certain that the long-term consequences of untreated social withdrawal are devastating personally and to society. Many studies now show that shy, withdrawn children are high risks for juvenile delinquency, academic failure, and many forms of adult mental health problems.

In an effort to exploit the cost-efficiency of teacher nominations, Greenwood and his colleagues have developed a structured nomination approach that has been found to be quite accurate. With this approach, teachers are asked to rank order children in their classes on the frequency of verbal interaction with peers. The children occupying the lowest five ranks are then designated for more detailed assessment and treatment planning. The teacher ranking approach is clearly preferable to the nomination method in terms of accuracy.

Teachers may also choose to screen children for interpersonal skill training based upon **sociometric assessment**. Where there is reason to believe that children's attitudes and perceptions of each other are contributing to interpersonal skill problems, then sociometric methods may uncover particularly useful information. Sociometrics are designed to assess children's social standing within a group by soliciting nominations and rankings from relevant peers (e.g., classmates).

Many sociometric techniques are available, but rating scale procedures are quite time-efficient and they have certain methodological advantages over other procedures. For example, rating scale techniques assure that **each** child in a group receives an evaluation by peers. Also, we have recently shown that rating scales have excellent test-retest reliability and sensitivity to treatment effects.

A rating scale that we have used successfully with handicapped children across a wide age range is the *Peer Acceptance Scale*. This is a forced choice scale on which every group member rates every other group member by marking appropriate figures in a series of three stick figure drawings adjacent to the name of each child in the group. As indicated in Figure 1 (page 64), the three figures represent: 1) two children playing ball together labeled "Friend," 2) two children at a blackboard labeled "All right," and 3) two children with their backs toward each other labeled "Wouldn't like." Children are asked to fill in circles below the figures which indicates their choice.

Unlike the cut-off point used with the teacher-ranking method, there are no clear "acceptance" or "rejection" levels that teachers can use as a general guide for deciding who should receive interpersonal skill training. There are several important questions regarding screening and potential treatment that can be answered via sociometric methods:

a) Are there children in the class who are uniformly "rejected" (receive "Wouldn't like" ratings) by the majority of class peers?
b) Are there children who you feel have reasonable interpersonal skills, yet they are "rejected" by a large number of classmates?

Figure 1

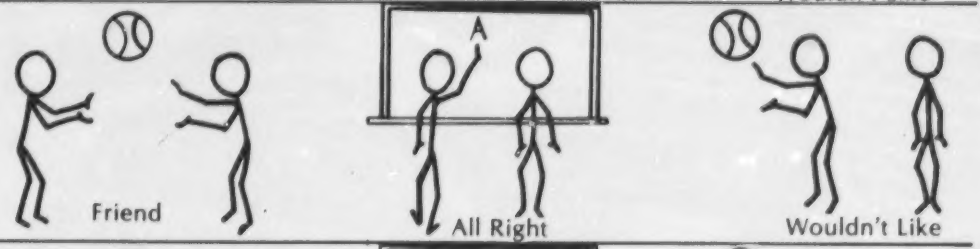
Name _____

Teacher Johnson

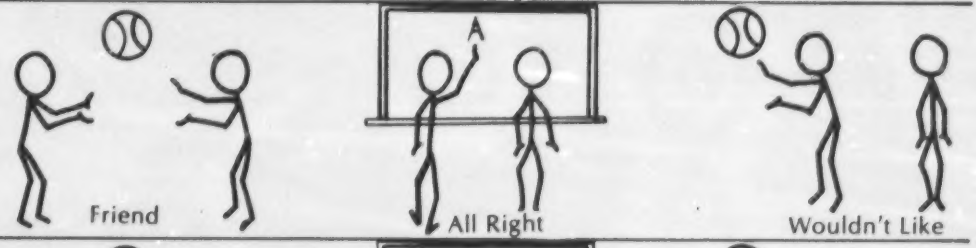
Code 4 Pod B-10

Jim Harson

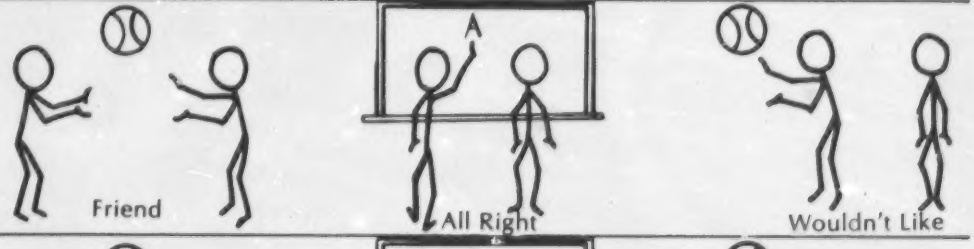
Mary Baker



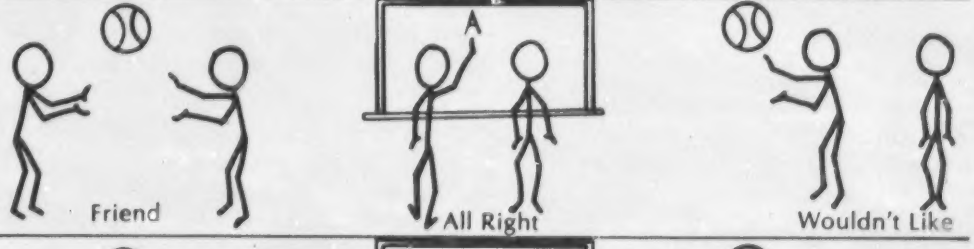
Timothy Leaves



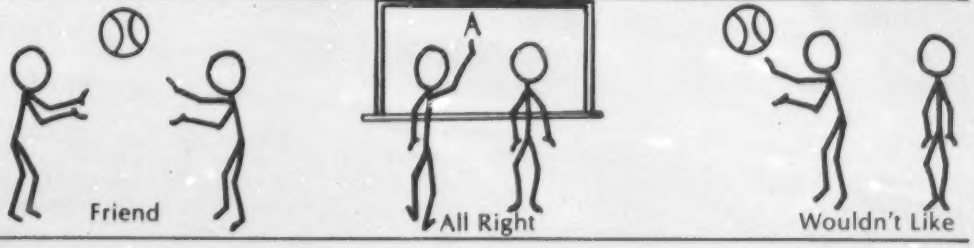
Sarah Chant



Robert Mench



Bonnie Stenman



c) Are there children in the class who report that many children are **their** "friends," but who do not receive reciprocal "friend" ratings by others?

We should add that sociometric methods are not without their drawbacks. When used with preschool-age children, the reliability of sociometrics is questionable. Also, sociometric ratings **do not necessarily** correspond with directly observed skills. Lack of skill is only one possible factor that can contribute to low sociometric rating.

What to Teach

After children have been identified tentatively as intervention candidates, it is necessary to specify the target skills for training. While we strongly advocate using direct observations on children's skills to determine behavioral pinpoints for intervention, such intensive assessment is precluded at times by manpower limitations. In cases where careful observation is not feasible, teachers may employ a number of **indirect** methods of behavioral assessment. These methods include: 1) standardized behavioral checklists and rating scales, 2) self-report by students, and 3) behavior analog tests.

Indirect Assessment Methods

In terms of standardized checklists and rating scales, there are a number of **general** problem behavior inventories that contain items specific to interpersonal skills. For example, *A Process for In-School Screening of Children with Emotional Handicaps, Behavior Problem Checklist*, and *Walker Problem Behavior Identification Checklist* all require teachers (or signficant others) to determine whether such descriptors as, "has few friends," "speaks infrequently to peers," and "often argues with peers" are true when applied to specific youngsters. With the exception of the Walker Checklist, the descriptors are generally too broad to be used as treatment targets; and, of course, none of these instruments approximates an exhaustive catalogue of interpersonal skills.

One rating scale that focuses exclusively on interpersonal skills has been developed albeit at the preschool level only. The nine-item Social Behavior Rating Scale (SBRS) requires teachers to describe on a seven-point scale, from "false description" to "true description" if a particular child:

a) Works on projects with classmates
b) Engages in verbal exchanges with classmates
c) Volunteers to talk during the discussions
d) Responds positively to initiations by other children
e) Volunteers for classroom social activities
f) Assumes leadership role in class
g) Engages in long conversations (30 seconds or more)
h) Approaches a group of classmates and attempts to get involved
i) Talks and plays with a large number of classmates

This scale has the advantages of sound test-retest reliability, and reasonable correlational levels with directly observed skills and sociometric status. Greenwood and his colleagues have used the SBRS with considerable success as a second level of assessment following initial **teacher rankings** of all class members. As with other rating scales, teachers *may* find that more detailed behavior analysis and description is needed in order to specify treatment goals.

A rich and often overlooked source of data on "What to teach" is self-report information from students. The most casual form of self-report information would come from a simple interview by the teacher that focuses on interpersonal skills that children want to alter or improve. Of course, we are talking about an interview procedure that **excludes** nonverbal children or children who are psychotic. Nevertheless, it may be a bit elitist and shortsighted not to offer children an opportunity to express their own intervention goals in the interpersonal domain. We are not advocating any "insight-oriented" interview in which children explore the etiology of their skill deficits. Rather, we simply suggest that asking children what they like and dislike about their interpersonal contacts may help to prioritize intervention goals.

Behavior analog tests usually consist of a sequence of problematic or conflict situations in which children are asked to "play-out" the scene in a manner that most closely matches their typical behavior in similar real-life situations. The Behavioral Assertiveness Test for Children and the Behavioral Assertiveness Test for Boys are the only standardized instruments that focus on interpersonal skills, and here the subset of skills is quite limited. We would suggest, however, that the general notion of an analog test has some distinct advantages. First, such a procedure could be used to effectively study low-frequency by significant skills. Take, for example, the use of **verbal compliments**. From our own observational research we know that this behavior occurs very infrequently, yet it clearly differentiates between groups of children who are liked and disliked by peers. It is simply not feasible to follow children about all day long for several weeks to gather a reasonable sample of verbal complimentary behavior. However, teachers could easily present children with pertinent vignettes and ask them to behave as they typically would. For example:

> "Your classmate has just gotten his math paper back with a mark of 100. You know how hard math is for Jim and how difficult making 100 is. What do you do when he shows you his paper?"

Of course, our subject in this case has the full range in which to respond. He might give a verbal compliment, "That's great, Jim;" say "Who cares;" tear up Jim's paper and tease him; or not respond directly at all.

There seem to be a number of "low incidence" interpersonal skills that are particularly suitable for such informal analog assessment, including: verbal compliments; resolving conficts over possessions; offering verbal or physical assistance when a person is injured or has their feelings hurt; expressing anger in an acceptable fashion; and asking for help.

Direct Assessment Methods

Within the behavioral education movement, direct observation of children's social behavior has been the most favored tactic for determining what to teach. The primary attractiveness of direct observation procedures is the close correspondence between the content of assessment and the content of intervention; and, the opportunity to examine the effect of children's interpersonal skills (or lack thereof) on social partners and vice versa.

There is now a growing body of observational research in which the interpersonal skills of more and less "competent" children have been studied. In the typical research paradigm, children are selected for observation based upon some criterion index of competence, like teacher nominations and rankings, or sociometric status. Using this approach a number of **seemingly** generic skills have been identified. By generic we mean that the skills do not seem limited to particular social contexts or overly restricted by the developmental level of children involved in interaction. Example skills include:

a) *Initiating social contact* as in greeting others, exchanging information, or including others (e.g., "Come play with me")
b) *Maintaining visual orientation toward social partner*
c) *Sharing toys and materials*
d) *Physically or verbally assisting another to accomplish some task*
e) *Responding quickly* (within three sec.) **and positively** to approach behaviors by peers
f) *Showing affection* as in hugs, kisses, and holding hands
g) *Complimenting others* on their appearance, work, efforts
h) *Resolving conflicts by negotiation, persuasion, or ignoring.*

We also know from observational research that certain behaviors are typically associated with low social status, few friendships, and poor teacher ratings. These maladaptive behaviors include:

a) *Making derogatory remarks* about a persons' appearance, work, efforts
b) *Disrupting others' play or work*
c) *Unprovoked aggression toward peers.*

The various skills and maladaptive behaviors cited above are by no means an exhaustive compilation of treatment targets. They do however represent behavioral targets for instruction that have been **consistently** identified across settings, client groups, and experimenters.

In many cases, classroom teachers will find that the best way to decide what to teach is to directly observe the children in their class. The skills that are chosen for observation may be (and probably should be) very specific to individual teachers, settings, and children. However, it is possible to describe some common parameters of sound observational methods for assessing interpersonal skills.

First, an observational system needs to be sensitive to the initiated-responded dimensions of interpersonal exchanges. Earlier in this paper we provided a temporal definition of initiated and responded behaviors in an interaction sequence.

Second, an observational system needs to be constructed such that a **representative** sample of skills is obtained. Fortunately, there are some fairly well-established guidelines for deciding how much observational data to collect. Greenwood and his colleagues, for example, have found with preschool-age children that three seven-minute sessions (one session each day) can provide an accurate portrayal of children's overall level of social participation. With more detailed behavior categories, we have demonstrated that six five-minute sessions (one each day) provide a representative picture of interpersonal skills. We would caution teachers that the guidelines for length of observation cannot be used as "hard-and-fast" rules. There are at least two situations that call for modification of these guidelines. The first case is that of **zero baseline**. Where children do not exhibit a skill(s) across two or three observation sessions, we have seldom found it useful to collect further information prior to intervention. The second case is that of extreme variability in skill performance across sessions. In situations where youngsters vary from zero performance to 100 percent of available occasions to exhibit a skill, we have needed to collect as much as ten five-minute sessions (one each day) before an average level of performance can be stated with confidence.

Third, the "sample size" guidelines mentioned above are limited to observation in **one** setting. Therefore, if one is interested in the children's display of a skill across two or more settings (e.g., recess and seat-work time), the guidelines suggested apply to **each** observational context.

Finally, it is absolutely essential to design an observational system that is efficiently used in a classroom situation. While classrooms differ in resources and times, we offer the following options for making carefu' observation feasible:

a) Set aside a time of the day for observation only; similar to the scheduling of other integral classroom activities and curriculum areas.
b) Train as many persons as possible to collect observation data (e.g., children themselves, aides, parents, volunteers, teachers-in-training).
c) Use the initial assessment data to decide what to teach **and** as a baseline from which you can evaluate instruction. At this point, the observation and instructional processes are one.

How to Teach

We should reiterate at this point that the primary focus of this procedures-based paper is intervention with severely behaviorally handicapped children who are functioning developmentally at a preschool level. Other interventions for other groups can be found in the reference section of this paper.

For about ten years now, we have been involved in research efforts aimed at identifying effective intervention procedures for treating the interpersonal skill deficits of young, severely handicapped children. When we first began to explore different intervention techniques, we initially tested a variety of teacher-

manipulated antecedent and consequent events.

In terms of antecedent events, we had teachers provide children with high-interest, cooperative-use toys; we had them assign children specific role-related behaviors in dramatic play episodes (e.g., Goldilocks pretending to try out beds); and we had them directly prompting positive social contact (e.g., lead a child to play group and say, "Pass Jim the ball"). In terms of consequent events, we had teachers provide handicapped children and their classmates with positive social statements when they played together cooperatively.

Although all of these teacher-manipulated techiques resulted in immediate, sometimes profound change in children's level of social participation, we eventually moved toward the use of peers as primary intervention agents. There were three factors that prompted this shift in intervention procedures. First, an unintended outcome of teacher-mediated intervention was **brief** interpersonal contacts between children. That is, prompting and reinforcement was successful in increasing the level of discrete social contacts between children, but these contacts were, at the same time, limited in duration by the intervention procedures. Put very simply, children stopped interacting with one another and attended to the teacher when she was reinforcing their positive contact. A second factor leading to our interest in peer intervention agents was the lack of generalized effects associated with teacher-mediated treatments. Children often behaved as if the adult-delivered contingencies were the sole influence over their interpersonal skills. When the intervention procedures were not available, the children immediately reverted to their isolate, maladaptive behavior patterns. The final factor promoting the shift to peer intervention agents was the number of handicapped children in need of interpersonal skill training. The sheer volume of potential intervention candidates precludes an "adults-only" model of treatment.

Materials and Setting Arrangements

As in any other instructional area, the teaching of interpersonal skills requires careful attention to curriculum materials and arrangement of the learning environment to facilitate instruction. Since the primary social context for preschool-level children is play activity, the selection of toys and materials is vital. A number of naturalistic studies have been conducted in which children's cooperative play behaviors have been examined according to the play materials in use at a particular time. Additionally, we have evaluated the effects of certain materials during intervention studies with skill-deficient children. From these two data sources, there is a substantial amount of information to suggest the use of the following items in skill training with preschool-level children: blocks, doll house and dolls, trucks and cars, balls, wagon, water/sand table, puppets, and toy telephones. There are also a few items that seem to be associated, primarily, with nonsocial activity. These include clay, books, paints and crayons, and puzzles.

Of course, how activities are structured will have a great influence on whether any material is used in a cooperative fashion. From extensive observational study we have found that make-believe, dress-up games, rough and tumble play, and **child-initiated** activities are **most** conducive to interpersonal skill instruction. Further suggestions for increasing the likelihood that children will actively participate in planned activities have been validated by Doke and Risley (1972):

a) Children are dismissed from an activity **individually**, and they do not have to wait for the entire group to finish.
b) There are enough materials to enable all children to participate in the activity (e.g., enough dress-up clothes for each child).
c) Adults are available to assist children in organizing and completing activities.

Selecting and Training Peer Intervention Agents

Like the presidency of the United States, the job of peer intervention agent does not require extensive experience and prior training. In the course of our intervention studies we have successfully trained intervention agents from three to twelve years-of-age. These intervention agents have included normally developing youngsters as well as children categorized as moderately mentally retarded, mildly mentally retarded, and behaviorally disordered. We do suggest, however, that whenever possible, you select potential intervention agents who:

a) Attend school regularly, in order to ensure continuity of intervention
b) Do not engage in a high rate of negative interaction with peers
c) Can reliably follow the verbal instructions of teachers; and
d) Can attend to assigned tasks for at least ten minutes without extensive teacher supervision.

Once a child is selected as an intervention agent, the next step is to train the youngster to implement the intervention procedures. The peer-mediated intervention that we have validated with severe behavior problem children is described as the *Peer Social Initiation Procedure*. In this procedure, the intervention agent is required to initiate social contact with target children using the following "approach" behaviors: 1) Play organizers (e.g., "Let's play trucks," "Throw me the ball, and I'll throw it back"); 2) shares (e.g., giving target children objects with which to play cooperatively); and 3) physical assists (e.g., pulling child in a wagon, helping child onto a swing). These social initiation behaviors are included in the intervention because they have been shown to set the occasion for sustained, positive interaction between young children.

There are two basic steps involved in training children to implement the social initiation procedure:

a) Explain to the peer trainer what is expected during the training sessions and later during the intervention sessions with peers.
b) Train the peer trainer to use the designated social initiations during 20-minute role-play sessions, as depicted in Table 2.

Table 2: Training Procedures Employed During Each of Four Peer Instructional Sessions

Training Procedures	Desired Peer Behavior	Consequences and Schedule of Delivery
SESSION 1		
The teacher instructs the peer that he is going to learn how to help the teacher by getting other children to play with him. The teacher indicates that asking children to play a particular game is what they will practice first. Teacher then models appropriate behavior and asks peer to try asking him to play (sequence has ten repeats).	"Come play," "Let's play school," "Lets play ball," etc.	Teacher delivers social praise to peer on an FR 2 schedule. Teacher ignores every other response, then says, "Many times children will not want to play at first, but you need to keep asking them to play."
The teacher instructs the peer that it is also important to give children toys with which to play. The teacher models appropriate behavior and asks peer to try giving him something to play with when he invites him to play (sequence has 20 repeats).	Verbal behavior identical to that shown above plus handing a play object (ball, block, toy truck, etc.) to teacher	Teacher delivers social praise to confederate on an FR 2 schedule. Teacher ignores every other response, then says, "Sometimes children won't play, even when you ask nicely and give them something to play with, but you will need to keep trying very hard to get them to play."
SESSIONS 2, 3, 4		
Repeat of Session 1	Same as Session 1	Same as Session 1

There are two essential ingredients to the training paradigm depicted in Table 2. First, peer intervention agents are trained to expect rejection. This is accomplished by the adult trainer modeling the typical isolate behavior of target children. Thus, peer intervention agents are given direct experience regarding repeated initiations to socially unresponsive children. The second essential element of the training paradigm is the feedback given to the peer intervention agent when isolate behavior is modeled by the adult (e.g., "That's one thing that might happen when you first ask children to play").

Normally developing children have required from four to six 20-minute training sessions, whereas handicapped intervention agents have required eight to ten sessions to complete training.

Conducting Daily Intervention Sessions

In order to ensure the smooth operation of daily intervention sessions, we suggest close adherence to the five guidelines described below:

a) It is important that intervention agents have ample time each day to work with target children on an individual basis. Set aside five to six minutes for each target child, with a single intervention agent working with no more than three children each day. The five to six minutes for daily sessions is not a magic number, however, less time may not be sufficient to obtain satisfactory levels of behavior change. Adding substantial time may "stretch the limits" of peer trainers' ability to attend vigilently to the task at hand.

b) Try to use the same play area and materials each day. Continuity and predictability will also be aided by consistent scheduling of intervention sessions.

c) The peer intervention agents should be provided with a brief review prior to daily

intevention sessions. The content of this review should focus on what activities seem to be most conducive to interaction with specific children and a reminder that children may not be responsive at first.

d) If the intervention "bogs down" with a particular child (i.e., child is not responsive to repeated initiations), encourage the peer intervention agent to switch toys or activities.

e) At the end of daily sessions, be sure to praise the peer intervention agent for participation. Besides providing this daily feedback, we also suggest a special reward at the end of the week (e.g., ice cream cone, hamburger).

The peer-mediated intervention described above has been used successfully with a wide range of skill-deficient children, including youngsters with **severe** behavior problems. The case study material that follows illustrates the degree of handicap that characterizes the more impaired youngsters who have profited from peer-mediated intervention.

Case Study - Teddy

Teddy was a ten-year-old boy who was diagnosed at age three as autistic. At the time of intervention he had not been taught to eat, dress, or bathe himself. He often cried for long periods of time while engaging in some repetitive behavior (e.g., calling his name, rolling a truck back and forth). When he was upset he smeared feces on his body and bit his arm. Teddy had an extensive two-word vocabulary, though much of his speech was socially inappropriate.

With children like Teddy, and any others who have less severe behavior problems, interpersonal skill deficits can often go unattended. When we consider interpersonal skill deficits, we are not talking about a problem that is necessarily disruptive to others or the class routine, and we are not talking about a problem that is readily noticeable in a classroom of children with severe behavior disorders. We are, however, talking about a problem that is **profound** in its immediate and long-term effects on children; and we are talking about a problem that we can do something about!

References

Dy, E.B.; Strain, P.S.; Fullerton, A.; and Stowitschek, J. "Training Institutionalized, Elderly Mentally Retarded Persons as Intervention Agents for Socially Isolate Peers." *Analysis and Intervention in Developmental Disabilities*, 1981, **1**, 199-215.

Gable, R.A.; Hendrickson, J.M.; and Strain, P.S. "Assessment, Modification, and Generalization of Social Interaction Among Multihandicapped Children." *Education and Training of the Mentally Retarded*, 1978, **13**, 279-286.

Ragland, E.U.; Kerr, M.M.; and Strain, P.S. "Effects of Teacher-Mediated Peer Feedback on the Social Play of Withdrawn Children." *Behavior Modification*, 1981, **5**, 347-359.

Strain, P.S. and Ezzell, D. "An Observational Study of the Sequence and Distribution of Behavioral Disordered Adolescents' Disruptive/Inappropriate Behaviors in a Residential Setting." *Behavior Modification*, 1978, **2**, 403-425.

Strain, P.S.; Shores, R.E.; and Kerr, M.M. "An Experimental Analysis of "Spillover" Effects on Social Interaction Among Behaviorally Handicapped Preschool Children." *Journal of Applied Behavior Analysis*, 1976, **9**, 31-40.

Thorndike, E. *The Principles of Teaching*. New York: A.G. Seller, 1906.

Topical References List

Teacher Nominations of Skill Deficient Children

Greenwood, C.R.; Walker, H.M.; and Hops, H. "Some Issues in Social Interaction/Withdrawal Assessment." *Exceptional Children*, 1977, **43**, 490-499

Greenwood, C.R.; Walker, H.M.; Todd, N.M.; and Hops, H. "Selecting a Cost-Effective Screening Measure for the Assessment of Preschool Social Withdrawal." *Journal of Applied Behavior Analysis*, in press.

Hops, H. and Greenwood, C.R. "Assessment of Children's Social Skills." In E.J. Mash and L.G. Terdal (Eds.), *Behavioral Assessment of Childhood Disorders*. New York: Guilford Press, 1981.

Hops, H.; Walker, H.M.; and Greenwood, C.R. "PEERS: A Program for Remediating Social Withdrawal in the School Setting: Aspects of a Research and Development Process." In L.A. Hamerlynck (Ed.), *The History and Future of the Developmentally Disabled: Problematic and Methodological Issues*.

Use of Rating Scale Sociometrics

Bruininks, R.H.; Rynders, J.E.; and Gross, J.C. "Social Acceptance of Mildly Retarded Pupils in Resource Rooms and Regular Classes." *American Journal of Mental Deficiency*, 1974, **78**, 377-383.

Bruininks, V.L. "Actual and Perceived Peer Status of Learning-Disabled Students in Mainstream Programs." *Journal of Special Education*, 1978, **12**, 51-58. (a)

Bruininks, V.L. "Peer Status and Personality Characteristics of Learning Disabled and Nondisabled Students." *Journal of Learning Disabilities*, 1978, **11**, 484-489. (b)

Use of Problem Behavior Inventories/Checklists

Hops, H. and Greenwood, C.R. "Assessment of Children's Social Skills." In E.J. Mash and L.G. Terdal (Eds.), *Behavioral Assessment of Childhood Disorders*. New York: Guilford Press, 1981.

Hops, H.; Walker, H.M.; and Greenwood, C.R. "PEERS: A Program for Remediating Social Withdrawal in the School Setting: Aspects of a Research and Development Process." In L.A. Hamerlynck (Ed.), *The History and Future of the Developmentally Disabled: Problematic and*

Methodological Issues. New York: Brunner/Mazel, 1979.

Bower, E.M. and Lambert, N.M. *A Process for In-School Screening of Children with Emotional Handicaps*. Princeton, New Jersey: Educational Testing Service, 1972.

Quay, H.C. and Peterson, D.R. *Manual for the Problem Behavior Checklist*. Mimeographed, University of Illinois, 1967.

Walker, H.M. *The Walker Problem Behavior Identification Checklist* (test and manual). Los Angeles, CA.: Western Psychological Services, 1970.

Use of Behavior Analog Tests

Bellack, A.S.; Hersen, M.; and Lamparski, D.M. "Role-Play Tests for Assessing Social Skills: Are They Valid? Are They Useful?" *Journal of Consulting and Clinical Psychology*, 1979, **47**, 335-342.

Bellack, A.S.; Hersen, M.; and Turner, S.M. "The Relationship of Role Playing and Knowledge of Appropriate Behavior to Ascertain in the Natural Environment." *Journal of Consulting and Cinical Psychology*, 1979, **47**, 679-685.

Edelson, J.L. and Rose, S.D. "A Behavioral Role Play Test for Assessing Children's Social Skills." Paper presented at the 12th annual meeting of the Association for the Advancement of Behavior Therapy, Chicago, November 1978.

Michelson, L.; Wood, R.; and Flynn, J.M. "Development and Evaluation of an Assertiveness Training Program for Elementary School Children". Paper presented at annual meeting of the Association for Advancement of Behavior Therapy, Chicago, November 1978.

Reardon, R.C.; Hersen, M.; Bellack, A.S.; and Foley, J.M. "Measuring Social Skills in Grade School Boys." *Journal of Behavioral Assessment*, 1979, **1**, 87-105.

Van Hasselt, V.B.; Hersen, M.; Whitehill, M.B.; and Bellack, A.S. "Social Skill Assessment and Training for Children: An Evaluative Review." *Behavior Research and Therapy*, 1979, **17**, 413-437.

Use of Direct Observational Methods

Cooke, T.P. and Apolloni, T. "Developing Positive Emotional Behaviors: A Study in Training and Generalization Effects." *Journal of Applied Behavior Analysis*, 1976, **9**, 65-78.

Gable, R.A.; Hendrickson, J.M.; and Strain, P.S. "Assessment, Modification, and Generalization of Social Interaction Among Severely Retarded, Multihandicapped Children." *Education and Training and the Mentally Retarded*, 1978, **13**, 279-286.

Hops, H.; Walker, H.M.; and Greenwood, C.R. "PEERS: A Program for Remediating Social Withdrawal in the School Setting: Aspects of a Research and Development Process." In L.A. Hamerlynck (Ed.), *The History and Future of the Developmentally Disabled: Problematic and Methodological Issues*. New York: Brunner/Mazel, 1979.

Parten, M.B. "Social Play Among Preschool Children." *Journal of Abnormal and Social Psychology*, 1973, **28**, 136-147.

Porter, R.H.; Ramsey, B.; Tremblay, A.; Iacobbo, M.; and Crawley, S. "Social Interactions in Heterogeneous Groups of Retarded and Normally Developing Children: An Observational Study." In G.P. Sackett (Ed.), *Observing Behavior: Theory and Application in Mental Retardation*. Baltimore: University Park Press, 1978.

Strain, P.S. and Timm, M.A. "An Experimental Analysis of Social Interaction Between a Behaviorally Disordered Preschool Child and Her Classroom Peers." *Journal of Applied Behavior Analysis*, 1974, **7**, 583-590.

Tremblay, A.; Strain, P.S.; Hendrickson, J.M.; and Shores, R.E. "Social Interactions of Normally Developing Preschool Children: Using Normative Data for Subject and Target Behavior Selection." *Behavior Modification*, 1981, **5**, 237-253.

Behavioral Models as an Intervention Approach

Apolloni, T.; Cooke, S.A.; and Cooke, T.P. "Establishing a Normal Peer as a Behavioral Model for Developmentally Delayed Children." *Perceptual and Motor Skills*, 1977, **44**, 231-241.

Evers, W.L. and Schwarz, J.C. "Modifying Social Withdrawal in Pre-Schoolers: The Effects of Filmed Modeling and Teacher Praise." *Journal of Abnormal Child Psychology*, 1973 **1**, 248-256.

Evers-Pasquale, W. and Sherman, M. "The Reward Value of Peers: A Variable Influencing the Efficacy of Timed Modeling in Modifying Social Isolation in Preschoolers." *Journal of Abnormal Child Psychology*, 1975, **3**, 179-189.

Jakubcheck, A. and Smeriglio, V.L. "The Influence of Symbolic Modeling on the Social Behavior of Preschool Children with Low Levels of Social Responsiveness." *Child Development*, 1976, **47**, 838-841.

O'Connor, R.D. "Modification of Social Withdrawal Through Symbolic Modeling." *Journal of Applied Behavior Analysis*, 1969, **2**, 15-22.

O'Connor, R.D. "The Relative Efficacy of Modeling, Shaping, and the Combined Procedures for the Modification of Social Withdrawal." *Journal of Abnormal Psychology*, 1972, **79**, 327-334.

Peck, C.A.; Apolloni, T.; Cooke, T.P.; and Raver, S.A. "Teaching Retarded Preschoolers to Imitate the Free-Play Behavior of Nonretarded Classmates: Trained and Generalized Effects." *Journal of Special Education*, 1978, **12**, 195-207.

Peck, C.A.; Cooke, T.P.; and Apolloni, T. "Utilization of Peer Imitation in Therapeutic and Instructional Contexts." In P.S. Strain (Ed.), *The Utilization of Classroom Peers as Behavior Change Agents*. New York: Plenum, 1981.

Rosenkrans, M.A. "Initiation in Children as a Function of Perceived Similiarity to a Social Model and Vicarious Reinforcement." *Journal of Personality and Social Psychology*, 1967, **1**, 307-315.

Reinforcement-Based Strategies of Intervention

Allen, K.E.; Hart, B.M.; Buell, J.S.; Harris, F.R.; and Wolf, M.M. "Effects of Social Reinforcement on Isolate Behavior of a Nursery School Child." *Child Development*, 1964, **35**, 511-518.

Baer, D.M. and Wolf, M.M. "The Entry into Natural Communities of Reinforcement." In R. Ulrich, T. Stachnik, and J. Mabry (Eds.), *Control of Human Behavior* (Vol. II). Glenview, Ill.: Scott Foresman, 1970.

Buell, J.; Stoddard, P.; Harris, F.R.; and Baer, D.M. "Collateral Social Development Accompanying Reinforcement of Outdoor Play in a Preschool Child." *Journal of Applied Behavior Analysis*, 1968, **1**, 167-174.

Harris, F.R.; Johnston, M.K.; Kelley, S.C.; and Wolf, M.M. "Effects of Positive Social Reinforcement on Regressed Crawling of a Nursery School Child." *Journal of Educational Psychology*, 1964, **55**, 35-41.

Hart, B.M.; Reynolds, N.J.; Baer, D.M.; Brawley, E.R.; and Harris, F.R. "Effect of Contingent and Noncontingent Social Reinforcement on the Cooperative Play of a Preschool Child." *Journal of Applied Behavior Analysis*, 1968, **1**, 73-76.

Hops, H. "Social Skills Training for Socially Isolated Children." In P. Karoly and J. Steffen (Eds.), *Intellectual and Social Deficiencies*. Somerset, Ma.: Gardner, 1981.

Kazdin, A.E. "Vicarious Reinforcement and Punishment Processes in the Classroom." In P.S. Strain (Ed.), *The Utilization of Classroom Peers as Behavior Change Agents*. New York: Plenum, 1981.

Strain, P.S., and Timm, M.A. "An Experimental Analysis of Social Interaction Between a Behaviorally Disordered Preschool Child and Her Classroom Peers." *Journal of Applied Behavior Analysis*, 1974, **7**, 583-590.

Timm, M.A.; Strain, P.S.; and Eller, P.H. "Effects of Systematic, Response-Dependent Fading and Thinning Procedures on the Maintenance Child-Child Interaction." *Journal of Applied Behavior Analysis*, 1979, **12**, 308.

Wahler, R.G. "Child-Child Interactions in Free-Field Settings: Some Experimental Analyses." *Journal of Experimental Child Psychology*, 1967, **5**, 278-293.

Walker, H.M.; Greenwood, C.R.; Hops, H.; and Todd, N. "Differential Effects of Reinforcing Topographic Components of Social Interaction." *Behavior Modification*, 1979, **3**, 291-321.

Walker, H.M. and Hops, H. "The Use of Group and Individual Reinforcement Contingencies in the Modification of Social Withdrawal." In L.A. Hamerlynck, L.C. Handy, and E.J. Marsh (Eds.), *Behavior Change: Methodology, Concepts, and Practice*. Champaign, Illinois: Research Press, 1973.

Walker, H.M.; Hops, H.; and Greenwood, C.R. "RECESS: Research and Development of a Behavior Management Package for Remediating Social Aggression in the School Setting." In P.S. Strain (Ed.), *Utilization of Classroom Peers as Behavior Change Agents*. New York: Plenum, 1981.

Whitman, T.L.; Mercurio, J.R.; and Caponigri, V. "Development of Social Responses in Two Severely Retarded Children." *Journal of Applied Behavior Analysis*, 1970, **3**, 133-138.

Wusterbarth, N.J. and Strain, P.S. "Effects of Adult-Mediated Attention on Social Behavior of Physically-Abused and Neglected Preschool Children." *Education and Treatment of Children*, 1980, **3**, 91-100.

Peer Social Initiations as an Intervention Approach

Kerr, M.M. and Strain, P.S. "The Use of Peer Social Initiation Strategies to Improve the Social Skills of Withdrawn Children." In A.H. Fink (Ed.), *International Perspectives on Future Special Education*. Reston, VA.: Council for Exceptional Children, 1979.

Ragland, E.U.; Kerr, M.M.; and Strain, P.S. "Effects of Social Initiations on the Behavior of Withdrawn Autistic Children." *Behavior Modification*, in press.

Strain, P.S. "Effects of Peer Social Initiations on Withdrawn Preschool Children: Some Training and Generalization Effects." *Journal of Abnormal Child Psychology*, 1977, **5**, 445-455.

Strain, P.S. and Kerr, M.M. "Treatment Issues in the Remediation of Preschool Children's Social Isolation." *Education and Treatment of Children*, 1979, **2**, 197-208.

Strain, P.S.; Kerr, M.M.; and Ragland, E.U. "Effects of Peer-Mediated Social Initiations and Prompting/Reinforcement Procedures on the Social Behavior of Autistic Children." *Journal of Autism and Developmental Disorders*, 1979, **9**, 41-54.

Strain, P.S.; Kerr, M.M.; and Ragland, E.U. "Peer Social Initiations." In P.S. Strain (Ed.), *Utilization of Classroom Peers as Behavior Change Agents*. New York: Plenum, 1981.

Young, C.C. and Kerr, M.M. "The Effects of a Retarded Child's Social Initiations on the Behavior of Severely Retarded School-Aged Peers." *Education and Training of the Mentally Retarded*, 1979, **14**, 185-190.

Assertiveness Training

Bellack, A.S.; Hersen, M.; and Lamparski, D. "Role-play Tests for Assessing Social Skills: Are They Valid? Are They Useful?" *Journal of Consulting and Clinical Psychology*, 1979, **47**, 335-342.

Bellack, A.S.; Hersen, M.; and Turner, S.M. "Role-Play Tests for Assessing Social Skills: Are They Valid?" *Behavior Therapy*, 1978, **9**, 448-461.

Bellack, A.S.; Hersen, M.; and Turner, S.M. "Relationship of Role Playing and Knowledge of Appropriate Behavior to Assertion in the Natural Environment." *Journal of Consulting and Clinical Psychology*, 1979, **47**, 670-678.

Bornstein, M.R.; Bellack, A.S.; and Hersen, M. "Social Skills Training for Unassertive Children: A Multiple Baseline Analysis." *Journal of Applied Behavior Analysis*, 1977, **10**, 183-195.

Hersen, M. and Bellack, A.S. "Assessment of Social Skills." In A.R. Ciminero, K.R. Calhoun, and H.E. Adams (Eds.), *Handbook of Behavioral Assessment*. New York: Wiley, 1977.

Problem-Solving Training

D'Zurilla, T.J. and Goldfried, M.R. "Problem Solving and Behavior Modification." *Journal of Abnormal Psychology*, 1971, **78**, 107-126.

Shure, M.B. and Spivack, G. "Means-End Thinking, Adjustment, and Social Class Among Elementary School-Aged Children." *Journal of Consulting and Clinical Psychology*, 1972, **38**, 348-353.

Shure, M.B.; Spivack, G.; and Jaeger, M. "Problem-Solving Thinking and Adjustment Among Disadvantaged Preschool Children." *Child Development*, 1971, **42**, 1891-1903.

Spivack, G.; Platt, R.; and Shure, M.B. *The Problem-Solving Approach to Adjustment*. San Francisco: Jossey-Bass, 1976.

Spivack, G. and Shure, M.B. *Social Adjustment of Young Children*. San Francisco: Jossey-Bass, 1974.

Spivack, G. and Spotts, J. *Devereux Child Behavior Rating Scale Manual*.

What Does This Mean for Teachers?

by Tim Virden

Tim Virden is a special education classroom teacher for autistic children in Cedar Rapids, Iowa. In addition to his work with autistic children, he is active in a consulting capacity with Boy's Acres Residential Treatment Program. Virden is a leadership development intern with the Cedar Rapids Schools, the special education teacher respresentative on the district's Staff Development Advisory Committee, and the secretary of the Cedar Rapids Education Association.

Introduction

In the following pages I will attempt to respond to the preceding chapters from a classroom teacher's perspective. I feel the teacher's point of view is exceedingly important in that it is the teacher who has the most dramatic affect on the children at issue. Throughout the preceding chapters these children have been refered to in a variety of ways: emotionally disturbed, behaviorally disordered, chronically disruptive, mentally handicapped, etc. In fact, all of these children, from the most mildly involved to the most profoundly autistic, are functioning in a distressed condition. Whatever the cause and whatever the effect, all of these children are without adequate skills necessary to maintain productive involvement within their specific home and school environments. Their socialization, academic achievement, life skills, communication, and self concept may all be affected, either singularly or in a variety of combinations. For the purposes of this paper I will refer to these individuals as "distressed children." This will include children extending throughout the entire continuum of behavior disorders.

It has been my experience that the many issues confronting professionals working within the "behavioral studies" fall into two categories; those promoting the state of the "science" and those promoting the state of the "art."

Those issues without direct impact on children I refer to as promoting the state of the "science." While they are important and have impact on the development of a more precise vision of the emotional condition and the treatment of that condition, many of these issues seem far removed from the immediate issues of providing successful experiences for specific individuals or classrooms. As I read the preceding chapters I could not help but feel divorced from many of these issues.

It is the teacher and those individuals who come into direct contact with distressed children who promote the state of the "art." This art being the maintenance of a classroom which fosters emotional reconstruction and academic achievement. This is a complex task which is completely in the hands of these individuals. It is often dependent upon the teacher being able to delicately orchestrate the complex relationships between these distressed children, the severity of their specific problems, parents, schools and institutions, curriculum, other teachers, students, agencies, and communities.

While I have distinguished between the "art" and the "science" relative to the emotional disabilities domain, this is not to say these areas do not overlap. On the contrary, one is nothing without the other. It is important for the scientists and the artists to keep each other in mind so that each contribution will be significant and useful. An overlapping of ideas and accomplishments is paramount in the continuing growth of services for distressed children.

With this in mind, I will devote the rest of this response to addressing the following issues:

1. Special Education vs. Regular Education
2. Differential Diagnosis
3. Research-Based Knowledge
4. Medication
5. Programming for Distressed Children

Special Education vs. Regular Education

Since the origin of special education classes and particularly since the introduction of Public Law 94-142, there has been an explosion of both public and professional awareness of handicapping conditions. Everyone is suddenly aware of their "rights" under the new law, and we are all busying ourselves to see that no one is overlooked. The demand for specially certified teachers has increased and so has the need for professionals to train these teachers. Schools have devoted time and energy to child-find programs. They have opened programs virtually overnight. Everyone is excited and the programs continue to grow. Will there soon be a program for everyone?

While this may not be an altogether accurate picture it does make a point. When and where does a regular education stop and a special education begin? Who is actually in need of a specialized education and where does one draw the line. In some ways this may be a problem of differential diagnosis, but it also indicates a need for reassessment of our priorities. An evaluation of the standards being set for "normative" achievement and behavior, and the examination of teacher training programs for both handicapped and nonhandicapped children are needed.

Trippe and Mathey have raised issue with classrooms that cannot be adjusted to meet the needs of children. They indicate that a "handicap" established by biomedical deviation is "believed to require specialized

educational interventions that regular teachers are incompetent to provide." It is stated that "ninety percent of the children thought to be in need of special education are considered 'handicapped' simply because they do not meet the expectations of the regular classroom for learning, communication, and behavior." And further, "schools have the power to determine who is and who is not to be considered handicapped." This seems a rather severe indictment of our schools, but one that bears looking into. It makes one wonder if we are missing the point when the need for a specialized education requires so many of our young people to accept the label of "handicapped" and thus we loose the true meaning of the condition.

It seems ironic that special education teacher training programs are growing, not as logical extensions of the existing programs for regular education with students participating in an experience that would help them become more diverse individuals and perceptive teachers, but as separate departments. Many students operating within the schools for special education are reluctant to participate in experiences that would enhance their awareness of a "regular" education. This works in the reverse as well. Teacher educators express disbelief when confronted about this attitude of education students.

"Deans' Grants" on the mainstreaming of handicapped children are being funded for the express purpose of encouraging dialogue between regular and special education departments at universities throughout the United States. The very existance of a Dean's Grant is an indication that this attitude of separateness is present in the very organization of our teacher training institutions. It seems a sad commentary that with the development of programs that are supposed to enhance a child's chances for success, our teachers may become one of the greatest obstacles to that success.

Differential Diagnosis

The problem of distinguishing the mentally disabled from the emotionally disabled from the learning disabled is a common occurance within the special education classroom. Teachers address the inconsistancies of diagnosis and labeling daily and many times ask themselves "How did this kid get in here anyway?" At the risk of sounding overly pragmatic, it doesn't really matter. What matters is where we go from here and how we get there.

We would be fooling ourselves to think there is a fine line drawn between each and every handicapping condition. To say that there was a "gray area" between them would not go far enough. While some of these conditions may have an obvious origin and prescriptive treatment, most of them probably do not. The human organism remains one of man's greatest mysteries, and the brain is probably the greatest mystery of all.

Given the complex task of diagnosis with all of the medical, emotional, and environmental implications, it seems a bit presumptious that schools should even attempt such diagnosis. Even in the best of our school systems, there is seldom a medical professional available at the time a child is labeled as learning disabled or mentally disabled. Only in the most severe cases is a psychiatrist consulted when a child is labeled emotionally disabled. It seems an injustice is done to label these less distinguishable disabilities at all when there are so many unknowns. This is not to say that all situations present the problems of differentiating the specific disabilities, but a good number of them do.

So we have children who don't fit in. They act out. They don't catch on. They are disruptive. They don't learn and other student's chances for learning are diminished. If the child is unsuccessful where he is, then he will be placed where he will succeed. We may not know just what to label him, but we will come up with something. We may not know just where to put him, but we will find a place.

With all of the uncertainties relative to diagnosis, the work will continue. Scientists will continue investigating, and the universities will continue their studies. We will discover and then dispute. We will weed out the obstacles and then new ones will surface. We will define and redefine. We will have answers that raise more questions. We will be certain we are right and then certain we are wrong. And always, there will be more kids and more classrooms.

When these children arrive in their classrooms all of this work will not really matter. All of the scientific discoveries and carefully worded definitions will not make the difference in the child's success. This is not to say that these things are not important, but rather that they are not enough to make the difference. It is the teacher who makes the difference. It is the ways in which that teacher orchestrates the complex dynamics of that classroom which make the difference.

Regardless of how sophisticated we become in our diagnosis, there is still the dynamic mix of personalities and exceptionalities which make each classroom unique. A teacher may question the diagnosis and dispute the findings, but when it comes to the bottom line, the school buses will arrive and there is a day's challenge ahead. All of the carefully written definitions and scientific information won't matter if this challenge cannot be met.

Research-Based Knowledge

It would be foolish to dispute the importance of research-based knowledge in the development of programs for the emotionally distressed child. It is important to remember however, that this research must be meaningful and accessable to those professionals it is meant to assist. With the primary responsibility for assisting children in behavior change resting with classroom teachers, it is then essential that this research be relevant to these teachers.

Lakin has indicated in his chapter on research that "teachers live in a world which is very different from that of the professional scholar/researcher." "Clinical intuitions" play a most important part in every classroom teacher's data base when developing classroom strategies. If research is to become an important issue with the classroom teacher, it must be presented in such a way to make it relevant and practical to the classroom experience.

Lakin continues by drawing focus to the need for a "forum" allowing the exchange of information and inspiration drawn from informal research results. This is very much in keeping with the contention that classroom teachers are the essential link between the behavioral sciences and our many distressed children. The overlapping of the "science" and the "art" of the behavioral studies will only lend support in the development of more and better treatment programs if every effort is made to encourage an exchange of the vast resources of clinical information held by our classroom teachers.

Medication

The use of medication in assisting the distressed child to a more rewarding social and academic experience has been in constant debate since the conception of the idea. Medical experts and teachers alike align themselves on both sides of this explosive issue. Much has been written about the benefits of a well-prescribed medication program, and one can find an equal number of arguments as to its detrimental affects. While some professionals view drug treatment as a last resort, others look first to the possible imbalance of body chemistry. For some, the use of medication in the treatment of distressed children would be unheard of.

O'Leary has indicated that while the use of psychostimulant medication and behavior therapy on hyperactive children have resulted in short-term changes in regard to their social and academic behavior, there have been no long-term affects sited with either treatment method. He also suggests that long-term evaluations of behavioral treatment programs be conducted. This would be in the best interest of the scientific pursuit, however, the outcome seems predictable. While medically the issues of body chemistry are being addressed, the actual origins of hyperactivity have yet to be discovered. Coupled with the intricacies of a child's relationships to his home and school environments and the many other uncontrollable elements in each child's life, no program alone could be expected to remedy the vast implications of hyperactivity and emotional distress.

Schools can play an important role in collecting data that will assist doctors in prescribing for adequate drug treatment schedules. Doctors can assist teachers by acquainting themselves with the behavior management techniques used in the educational or therapy settings. Maximizing the use of information and the expertise of both the medical and educational professionals enhances the child's opportunity for success. There is such an important overlapping of factors that can affect the emotional condition of each individual it would be a disservice to deny the importance of an eclectic approach when treating these individuals. To overlook the possibility of a biomedical problem as a cause for hyperactivity or distressed behaviors would be denying our children the full benefit of our "science." However, to deny them an educational experience based on our best medical and clinical expertise, we would be withholding from our children the best of our "art."

Programming for the Distressed Child

The preceding chapters by Strain and Kerr, Simpson and Sasso, and Rezmierski and Rubinstein offer much for the classroom teacher. Each chapter deals directly with programming for distressed children. Each author approaches the questions of behavior management and behavior change quite differently, and each gives the classroom teacher much to think about. The issues related to behavior change are complex and deserve much time and consideration. The classroom teacher working directly with distressed children must continually address the management needs for these children.

As Rezmeirski and Rubinstein have pointed out, there has been a "vacillation between two major philosophical points of view regarding educational responsibilities to these children." The first "promotes the view that the responsibility of the school personnel is to facilitate and foster growth and learning within students." The second "fosters the view that a teacher's responsibility is to teach. . . a student who is either unable or unwilling to learn . . . must be placed in another setting . . ." While in many severe situations, the second of the two options may become necessary; it is sad to note that this is the approach common to the times.

Like our university teacher training programs, our distressed children and their classrooms are separated from the mainstream and again many fine teachers are led to believe that they lack the necessary skills to help the distressed child. The many students-in-training to become "regular" classroom teachers are led to believe they need not deal with these children as they require a "specialized" approach. This is not to say that some of these children don't need the specialized classroom, but rather, this questions whether the many mildly to moderately distressed children do. What a shame that we continue to allow ourselves to pidgeonhole our children and underestimate our potential as teachers.

If the segregation of distressed children is the "given" at this moment, then the major responsibility of their teachers is to provide an educational environment which will foster academic successes and stimulate emotional reconstruction. Materials are needed which provide teachers with suggestions, programs, systems, ideas, etc., in the creation of classrooms for helping children help themselves.

Many of the preceding chapters have indicated there is a need for programs that actually teach children self-management. Simpson and Sasso have stated that "students will be less interested in undermining a program if they have had a voice in creating it." They also say "The most successful teaching techniques for disturbed students at any level are those in which the students, whenever possible, set their own goals and monitor their own progress."

Rezmierski and Rubinstein have said that "Educators must have assistance in working with E.D. students, assistance with their own responses." They also point out the need for teachers to remain aware of the "cycles they become caught within. . .a student's behavior can ultimately culminate in a 'power struggle.'" It is so

important for teachers and other adults working with distressed children to have their own "logical processes" in order. Rezmierski and Rubinstein are so right when they stress the importance for adults to avoid being thrown into a defensive level of responsiveness and avoid being targeted by children in areas of personal vulnerability.

There are many examples of the interpersonal communication difficulties between teachers and their distressed students. For teachers to avoid becoming a part of the distress, both for themselves and their students, they must become good managers of their own behaviors and emotions. They must choose a management system that allows them to interact and "teach" their students with the least conflict possible.

Behavior modification is often chosen as a base for developing a management program. It not only offers a good format for data keeping, but also has components that transfer from one classroom to another. However, behavior modification is often criticized because there is often little transfer of learned behaviors from the "therapy" setting into the student's "life" setting.

We are then looking for a transfer of learned behaviors or systems for managing behaviors, adequate data for use in writing IEP's and showing growth or change, limited teacher involvement in power struggle situations, easy administration, promotion of communication within the peer group, smooth transitions back to as normal a classroom setting as possible, and appropriate time and attention given to academic advancements. This is a lot to ask of a teacher or program, yet without any of the above factors, the management system will be incomplete.

These challenges facing teachers of children with emotional and behavioral disabilities are enormous. In addition, the teacher must understand the vast range in disabilities; manage the classroom environment with the complexities offered by the integration of these disabilities; maintain a healthy and productive relationship with parents; and maintain consistent, objective, and rational approaches on a daily basis.

Too often teachers accept these challenges only to control behaviors and avoid conflict. Actual teaching (direct instruction) in behavior management with children is avoided. The actual tools of self-management, behavioral analysis, and communication are not developed. The child may relate well to his checklist and reinforcement menu, but he is unable to relate directly to his problems. The skills needed to analyze his behavior and express his needs and feelings have not been taught.

As children grow they are guided through important developmental stages. They are offered encouragement and a continued progression of new and more challenging tasks. If the child experiences difficulty in one or more areas, additional encouragement or instruction is provided. Children having problems with fine motor control or learning initial consonant sounds are able to receive remediation in a variety of ways. Reading laboratories, teacher associates, mother helpers, and peer teachers are all used in schools to provide the necessary instruction to teach and reinforce these skills. The same remediation and reinforcement can be found in many areas of the child's lifetime instruction. Why then is direct instruction and remediation often ignored with the emotionally distressed child?

If the learning disabled child learns new ways of learning, and the physically handicapped child learns new ways of operation relative to his specific disability, then the behaviorally and emotionally distressed child needs to learn new ways of behaving. He must receive direct instruction in self-management. He needs to be provided with the tools to analyze his behavior and the behavior of others. He must receive guidance throughout this process, and be helped with the refinement of his behavior as improvement develops.

The classroom provides an ideal environment where necessary skills can be developed: problems are easily identified, the student/teacher ratio is generally low, and a variety of social situations is available for trial of newly acquired skills. The environment offers safety and support during this difficult process and the child's peer group is present: all with problems, all in need of new skills to cope with these problems, and all with an unlimited capacity to care and help one another. Teachers will require much assistance in the development of effective management systems. Behavioral "scientists" and "artists" alike will need to join forces in their effort to assist our distressed children.

A Responsorial Hymn to PL 94-142

by David G. Sodac

David G. Sodac is an employee of the Mississippi Bend Area Education Agency in Davenport, Iowa. He serves as a programming consultant to school districts having Emotional Disabilities/Chronically Disruptive programs. Sodac has been a frequent presenter at professional meetings throughout the Midwest and is the instructor for the graduate level Emotional Disabilities sequence program at Marycrest College.

This monograph appears timely. Its authors have contributed boldly to address issues and plant seeds of suspicion. Are we where we want to be in this time of servicing youngsters with emotionally handicapping conditions? Never before have we been so visible, so open to controversy, as we are currently.

Let me presumptuously draw comparisons of the emotional disabilities field to that seen in Christianity. The B.C. era saw us hiding within the confines of public/private institutions, rarely having to be under the scrutiny of public education. On the heels of revered prophets, Public Law 94-142 exploded upon the scene of special education. Currently we are in the A.D. era following education's most poignant law. Our former hidden existence is now openly flourishing in every school district in the nation. Is our day of reckoning close at hand as legislators and taxpayers begin their scrutiny of wasteful allocations of monies? Can we justify our programming directions? Have we met the challenges addressed in this era-changing law?

The current state of our art appears to have been critiqued as one reads through the chapters in this monograph. I am not sure if this was the underlying intention of each author or my perceptions after reading the opening chapter by Matthew Trippe and John Mathey. Trippe and Mathey's chapter has signficantly impacted upon my former state of acquiescence. It was due to their message that I read, digested, and dissected each consequent authors' contributions. My intent throughout this chapter is to question.

Are we affecting the desirable outcomes intended through the placement of youngsters in special education programs? Who is benefitting - regular education or the disturbed/disturbing youngster? Each youngster identified for special class programs and receiving education through this placement averages twice the per-pupil cost of an education received in a regular class placement with additional cost through the employment of support personnel (i.e., educational psychologist, specialized programming consultants, school social workers, and administrative hierarchies) to supervise the support personnel involved. Consultation teams, consisting of psychologists, consultants, social workers, and administrators meet weekly to provide support measures to enhance remediation of behavioral deficits and excesses of each youngster placed in the program. Yet, we can't find in research that we are effectively remedying these youngsters handicapping problems.

Matthew Trippe's and John Mathey's challenge for reappraisal over the explosive growth that is taking place in labeling and serving children as handicapped and their couched accusations that many handicapping conditions are intentionally school-induced may cause quite a consternation among professionals, but are possibly accurate and on target. We have grown accustomed to regular education being responsible for normal students and special education being responsible for the handicapped. Their concerns definitely relate to our need for accountability in special education.

Charlie Lakin's article on research-based knowledge and professioal practices does seem to scratch the veneer of our often very presumptuous conclusions about the effectiveness of our special education programming. His observations on the condition of the research base of special education, particularly the area of emotional disabilities, is alarming. Virginia Rezmierski and Marla Frudden Rubinstein expressed concern that our programming approaches have become fragmented and have possibly weakened due to our tendency to incorporate a wide variety of viewpoints and approaches, precipitates confusion among professionals. Their suggestion for a problem-solving process to evaluate our goals may be critical.

O'Leary's address to the controversial nature of drug treatment versus behavioral therapy on hyperactive children only serves to reinforce concerns over treatment controversies that plague our possible ineffectiveness.

Richard Simpson and Gary Sasso's article appears designed to examine the role of applied behavior analysis procedures in facilitating the education and development of behavior disabled pupils. Their article can be viewed as an attempt to respond to the initial concern that we educators must be able to demonstrate that our intervention efforts do significantly modify behavioral excesses and deficits associated with special education youngsters. We must demonstrate accountability.

Phillip Strain and Mary Margaret Kerr's article warns us to dress up our personal/professional competencies in teaching youngsters. They remind us about the pitfalls of loosely organized curricula and the need for accountable, precise, and accurate measurements of what we set forth to accomplish and not just a reliance upon vaguely worded advice and laments.

Regular education appears to have gained

tremendously by the services mandated for all handicapped youngsters. We in special education have set ourselves up as the specialist. We have directly communicated to the regular educator that he no longer has the exofficio credentials one has to have to educate these youngsters. The regular educator does not have to contend with the youngster who emotionally drains the energies of the regular classroom teacher. There can be less emotional stress on the regular teacher who no longer has to expand the energies in redirecting the youngster to task; waste time on verbiage; reprimand or attend to the inappropriate, irresponsible behaviors of certain students; or have to find the time to adjust the curriculum to meet the needs of the academically deficient student.

Matthew Trippe and John Mathey refer to handicapping conditions as deviations from the expected standard. Students with these handicapping conditions require specialized educational intervention that regular education apparently is incompetent to provide. Because of this attitude, we in special education have supposedly developed our field and increased our staffs in order to provide expertise, understanding, and skills. Have we errored in special education?

The focus of Public Law 94-142 was to provide for mainstreaming, but instead we have broadened the scope of what is considered unacceptable in the mainstream of education and designed special education classrooms away from the mainstream. By doing so, we have communicated to regular education that what is wrong with their academic production assembly lines is not their management of their lines, but the handicapped youngsters. We have encouraged the rejection of youngsters from the mainstream assembly line so we venture out with the subassembly called special education.

As a consequence, regular education can now continue to operate a sufficient mainstream producing educated youngsters. The "products" that resists standardized educational packaging can now be more easily stamped and rejected from the instructional conveyor belt. Modified techniques to bend, fold, and induce learning won't have to be strapped on regular education now that the education industry has opened its specialized education line. Once special education factory outlets go on overtime to ready the special youngster for final inspection by regular education, can we guarantee our end products efficiency? Have our educational modifications effectively produced the desired outcomes to assure a smooth acceptance by the parent assembly line? Would it be more cost efficient to possibly channel energies into modifying the assembly line techniques of the parent factor to accommodate the mild to moderate handicapped youngsters? Should we possibly expend our capital outlay on the hiring of more regular education teachers? If the intent to Public Law 94-142 is to provide a genuine, appropriate education for all youngsters regardless of handicapping conditions, why aren't we challenging the higher education institutions to incorporate in their regular education curricula courses on identification, curriculum, and management adjustments? Through a Dean's Grant Project, Illinois State University designed a competency-based project to upgrade regular teachers' training to enable all children to be educated in the least restrictive environment as mandated by law. Few training institutions have equaled this challenge. The need to develop and implement a total teacher preparation program should become a priority of our training institutions.

There is more in this essay than the author's cynical comparisons of education to assembly line manufacturing. We in special education have much to learn from studying industry's modus operandi. Industry has seven basic factors that are taken into consideration when evaluating whether or not to venture out into a new product. Education did venture into a new product line called special education. In one sense, the venture is being related to specialized educational programming. As they ventured, the seven basic factors education should have considered are:

(1) Research must indicate that there is a market to make the new venture profitable.
(2) Are there adequate resources such as energy and available raw materials?
(3) Are there enough trained, skilled people to produce the new venture?
(4) Capital must be available to pay for the manufacture and distribution of the venture.
(5) Are the manufacturing techniques worked out?
(6) Are there adequate management personnel available who can coordinate and bring together the resources necessary to make and distribute the product?
(7) Is there a high enough potential for making a profit and a low enough risk of loss to attract investment capital?

What ensues is an attempt to address each of industry's seven factors through relating them to special education.

1. **Research must indicate there is a market.** We do appear to have the necessary available market existing in regular education. If encouraged by administrators and special education support personnel, regular education teachers are more than eager to rid themselves from expending the extra energy to redirect and attend to behavioral excesses, educational deficits of select youngsters. They do so in order to spend more time with the easily addressed youngsters willing to fit the expectancy standards of regular education. Regular education has been spurred on by legislation requiring the labeling of pupils as handicapped, thus creating circumstances which foster the necessity for viewing increasing numbers of children as handicapped. "The fact is that schools do define students who do not meet the expectations of the regular classroom as deviant or handicapped — mentally handicapped if the learning rate is found to be too slow, learning disabled if the mode or style of learning is too uneven or different, and emotionally disturbed/behavior disordered if the child's behavior or attitude toward self, others, and/or toward learning is thought to be inappropriate" (Trippe and Mathey). Rezmierski and Rubinstein allude to one of general education's major philosophies which 1) fosters the view that a teacher's responsibility is to teach and 2) which further supports the

need for the market of special education programming. "Any student who is either unable or unwilling to learn in such a setting must be placed in another setting or be brought into compliance. Such children have been identified and subsequently placed outside of the regular education stream."

2. **There must be adequate resources (i.e., raw materials, energy, housing, and equipment)**. As schools face declining enrollment and consequent downward-spiraling budgets, housing should never be of concern. Generally, buildings have idle physical classroom space. Although those administrators not desiring a special education program, particularly those designed for youngsters who disturb may occasionally throw out the "no available space" smoke screen, I am sure space is available as regular education enrollment shrinks. Over the years, special education programs have exploited allowable funds, possibly to the point of being wasteful. Every new gimmick on the market was snatched up by teachers. Marketing trends were eager to type across their catalogs "SPECIAL EDUCATION MATERIALS." The stocking of infrequently used supplies and materials has become far more conservative in recent years as school budgets feel the economic crunch.

   Obviously to operate any program a list of identified youngsters is a prerequisite. The essential raw materials are always available and in constant supply. There seems to be no end to the referral candidates from regular education classrooms. As private and state operated residential treatment centers narrow their openings and become far more selective in who they admit, the school system is continuously faced with the burden of providing an appropriate education for all.

3. **There must be enough trained people to help produce the new product**. We can assume the "new product" is the youngster who has maximally profited from his ED placement and is ready to be reintroduced to his former, regular education program. In order to prepare the youngster for reintegration, a trained teacher is needed. Our teacher training institutions were not adequately supplying this need at the time of the impact of PL 94-142. It seems that the initial trend of training institutions was to provide the supply for the demand of learning disability resource teachers. It hasn't been until recent years that school systems were experiencing numerous qualified applicants for available emotional disability teaching positions. To assure highly competent and professional, proficiently skilled teachers, today's training institutions will have to meet the challenge with applicable curriculum sequence offerings. As these educators must influence and shape the behavior of our emotionally disabled, they must have an adequate repertoire of educational competencies. The reliance upon programming consultants and the network of supportive personnel is a luxury that few states may be able to justify in the face of extensive funding cutbacks. Simpson and Sasso's address for the competent and effective educator becomes the responsibility of our training institutions. These authors concerns for teachers that must possess well-integrated, personal attributes and educational competencies does serve to accentuate the challenge our colleges and universities face.

4. **Capital must be available to pay for the manufacturing venture**. PL 94-142 has aided in mandating states to allocate the necessary funds from apportioned educational monies.

5. **The manufacturing techniques must be worked out**. Techniques do abound, but as Lakin indicates, such practices are often assumed to have been proven effective. "Reasonable assurance of their effectiveness through adequate research is still waiting to be undertaken."

6. **Management personnel who can coordinate and bring together all the necessary resources to assist in making and distributing the product must be available**. We have a rather extensive network of managers over our programs, but of concern is the most immediate manager, the building principal. We continually expect these administrators to fully support our programming philosophies, to understand our proported goals and to act as our liaison with the regular education teachers. Have we adequately educated our building principals to all the programming aspects involved with these disturbing youngsters? We expect extensive support from our building principals who basically have been schooled to set and enforce the parameters of permissable school behaviors in regular education. Rezmierski and Rubinstein indicate that in many schools teachers often found themselves divided between the directives from two different sources of authority. On one hand, we have the specialist support team prescribing the therapeutic handling of our ED youngsters often in contrast or conflict with the building administrator having to enforce the district's discipline code. On more than one occasion I have seen building administrators struggle with what they should be expected to do. We need to effectively train these administrators to the subtleties of intervening most effectively with our ED population. We can't be critical of their reactive measures, while claiming to be sensitive to their need to understand and have appropriate discipline repertoires available to them. We must assume that our special education administrative personnel have a sound knowledge base. It should be inherent in their positions of responsibility over the various disabilities in special education.

7. **The need to have a high enough potential for making a profit and a low enough risk of loss to**

attract investment capital. Mathey and Trippe pointed out that the basic and ultimate measure of program effectiveness must be the pupil's altered behavior. "Educators must be able to demonstrate that their intervention efforts significantly modify those excesses and deficits initially associated with special program placement and that special individual pupils are more appropriate for regular class placement as a result of the intervention." If we have satisfied customers in our regular education teachers, then it increases and demonstrates that it is worth the regular teachers' efforts to refer youngsters. It follows then that we have supportive evidence to continue our programming for these youngsters.

After relating industry's seven basic factors to education's decision to propagate ED programming, I feel we may have entered into a shakey business venture. The given positives are that we have the adequate resources, the sufficiently trained teachers, and the available financial support. Of concern is the potential for making the necessary "profit," the often fragmented and ill-researched base of our "manufacturing" techniques, and the poorly informed "on the job" managers. "It's only through abundant faith, considerable wishful thinking, and a ready willingness to leap chasms of ignorance with bold inferences that one can claim that much is being learned about those children and youth for whom or in the name of whose diagnostic category thousands of special education programs have been founded." (Lakin)

If it is not already evident from the preceding pages, I have been convincingly and philosophically impacted after digesting the various contributing authors' viewpoints. Mathey and Trippe's "School Induced Handicaps", shook my stolid belief in special education programming. It isn't that these authors are totally pessimistic in their perceptions of the current state of the programming arts, it is that we have quite a cleansing era to enter. It is highly evident that our approach to comply with the law has not been focusing on the mainstream, but on broadening the scope of what should be considered unacceptable, handicapped, and disabled. It seems rather convincing that we are communicating to regular education that they are incompetent in dealing with mild to moderate handicapping conditions within their classrooms. When we deal with large numbers of handicapped students in our special programs, it follows that adequate statistical analysis ought to exist in order to assist in our programming for these youngsters (K. Charlie Lakin's "Research-Based Knowledge and Professional Practices in Special Education").

Virginia Rezmierski and Marla Frudden Rubinstein's "To Punish or To Heal" made me question the dissonance issue that is occurring in our schools. It may well be the degree of the dissonance or the amount of the conflict and the disturbing element that impacts upon whether or not we place youngsters in our special programs. If we have a youngster that displays a difficult, problematic behavior set or repertoire and a teacher who designs to effect a behavioral change we can typically work with to implement interventions and frequently succeed in our attempts. On the other hand, if we have the same youngster in combination with a distraught teacher who is reactive at the severe dissonance level, we rarely will attempt interventions knowing any attempts could sabotage the chances of succeeding with those interventions. What that distraught teacher really is conveying is "Get that student out of my room"; so we place the student accordingly. I believe Rezmierski and Rubinstein are accurate when they propose the IBP model as a vehicle for determining prescriptive interventions. We need to focus on what it is that we can do to prevent the placement of a youngster into a special program. Currently, possibly out of necessity, we react to a referral as to whether or not the student fits a particular label and who should do what in preparation for this placement.

With K. Charlie Lakin's cautious attitude in mind, I critically reviewed K. Daniel O'Leary's "Pills or Skills" research. O'Leary's research was reflective of demonstrating short-term effects through treatment practices of behavior interventions, but not from the psycho-stimulant approach. His concern for the need of carefully controlled long-term research continues to be critical. His article also challenges research to: seek a differential assessment of hyperactivity versus aggressiveness in children; replicate Sprague/Slator studies to confirm the effect of medication on memory and learning; replicate studies across treatment sites in order to arrive at unequivocal conclusions.

Richard L. Simpson and Gary M. Sasso's "Use of Behavioral Strategies with Behaviorally Disordered Children and Youth" reinforced my personal programming orientations. Their article provided additional support to applying behavioral analysis procedures and facilitating the education and development of emotionally disabled students, however, it was not research based. "Without appropriate consideration of this tool, (behavioral analysis) educators will be denying themselves access to potentially beneficial resources." We professionals need articles to question and reinforce our orientation.

Up until Phillip S. Strain and Mary Margaret Kerr's article, the recurring theme weaved throughout the monograph represented a rather introspective and reflective analysis of the current state of the art. The vital need for an intervention to improve children's interpersonal skills was addressed by Strain and Kerr. Affective curricula models are necessary, needed, and frequently overlooked in our programming for these youngsters. However, these authors' article seemed somewhat out of sync with the overall tone of the entire publication. Strain and Kerr's contribution does meet the concern addressed by at least one other author. Lakin's concluding comments emphasize the educator's need for professional literature that is of a more practical and useful nature. Strain and Kerr's contribution is a professional interchange of ideas free of the highly technical and predominant descriptions of research procedures.

It's too late to assess the direction the field of emotional disabilities should have taken following the inception of Public Law 94-142. If you believe this day of reckoning actually is close at hand, we must begin to evaluate some of the issues brought forth in this

monograph. What should we do to secure and enhance our field for the future? Each contributing author has suggested a direction in which to channel our energies. We should heed those suggestions and meet those challenges.

(1) We should consider restructuring conventional, traditional teaching practices in order to more consistently accommodate the handicapped youngster in the mainstream.
(2) It seems long overdue that practitioners be given much greater opportunity to participate in decisions about what appears in professional journals. Lakin calls for a forum for informal research in addition to proceeding with improving traditional research practices.
(3) Support teams need to adopt a problem-solving approach, shifting their attention to preventing students from having to be placed in emotional disabilities programs.
(4) In order to draw usable inferences from research, the increased replication of studies and the critical need to design controlled, long-term treatment research must be begun.
(5) Educators must develop well-established goals and objectives for their students as well as carefully considered strategies for attainment of those goals.

Synergetic Planning for Emotionally Disturbed Children: Some Thoughts on the Future of Our Work on Behalf of Children

by Edward W. Schultz

Edward W. Schultz is professor, program in special education and rehabilitation at the University of Main at Farmington (UMF). At UMF he is co-director of the teacher training program in emotional disturbance. He is concerned about the phenomena of child pain, stress, and burnout in school, and in seeking constructive alternatives to them. Schultz has several publications and is the co-author of *Child Stress and the School Experience* which is soon to be released.

> "Let people realize clearly that every time they threaten someone or humiliate or hurt unnecessarily or dominate or reject another human being, they become forces for the creation of psychopathology, even if these be small forces. Let them recognize that every (person) who is kind, helpful, decent, psychologically democratic, affectionate, and warm, is a psychotherapeutic force even though a small one." (Maslow, 1970, p. 100)

I would like to begin by expressing my appreciation to Carl Smith for asking me to share my thoughts on the articles presented in this mongraph. It is an honor to be asked to do so for each article was written by a member or members of our profession whose work is highly regarded within the field.

I have another reason for being pleased with this opportunity. We are at an interesting point in our historical evolution. There are many paths available to us, some of which will offer significant promise for improved practice in our field. I believe the articles make a positive contribution in this regard. It is clear to me that these authors have given considerable thought to presenting us with useful information on some of the current issues in emotional disturbance. How we choose to make use of this information will be, of course, another story.

This chapter will present my thoughts on some of the issues raised by the various authors. In making my remarks, I will try to keep things simple. I will make some general comments on each of the papers, along with some specific comments on synergetic planning where I feel such comments are appropriate. I do not consider my remarks to be the "last word" on any of these subjects. Rather, they are simply thoughts I have that have been incubating for some time, and with this opportunity, gain access to expression.

There is always a risk in commenting on any complex, substantive piece of literature. There is always the danger that one "missed the point," and thus responded inaccurately, distorting the meaning of the author(s). I hope as I proceed this will not occur, and I apologize before hand for any such misperception that may occur. They will have been unintentional.

School-Induced Handicaps

There is much to ponder in the article prepared by Trippe and Mathey. Their work is both scholarly and insightful.

My initial reaction to the content of their article was an amorphous feeling of dejection. Their's is not a pleasant topic. I asked myself why was I feeling such dejection. Upon reflection, I began to understand that I was feeling as I was because I felt somewhat overwhelmed at the insidious nature of the problem as well as its complexity. I felt at a loss about where to turn, how to proceed, how to extricate myself from the rather gloomy picture portrayed by Trippe and Mathey. I found nothing uplifting in this article; nothing to generate hope — to help me get beyond the morass of labels and their effect, circuitous institutionally-based reactions to problems, assignment of blame and responsibility for a problem, and the effect of labeling across "handicapping" conditions.

The content of their article has the ability to polarize emotions. It would be easy to read it and upon completion say, "Baloney! How dare you say that about us!" or perhaps, "Right on! You said exactly what I've been thinking!" Their paper is written with feeling, and I sense a firm belief that we have gotten ourselves into a real mess in education and one that we must extricate ourselves from in a hurry! If I caught the spirit of their message, they seem to be saying that we have to find some new ways of thinking, feeling, and behaving in relation to children; that what we have at present is both conceptually and operationally dysfunctional; and worse, that we are adhering to a manner of thinking, feeling, and behaving toward children that disregards their needs as central to any system of "helping."

My darker side can only agree with this analysis of the present state of affairs in education. Children quite often are treated as objects in school, and we as educators have learned some pretty sophisticated ways of unloading our stress on them; thus creating discomfort and pain for them.

The "walking wounded" are all around us. For example, while recently presenting some information on the "conflict cycle" (Long, 1979) to some teacher

trainees in special education, a student raised her hand and proceeded to relate the following incident. She said, in essence, that when she was in one of the primary grades, her teacher tried to get her to write with her right hand instead of her left. She tried to comply, but it just didn't feel right to her. The teacher kept at her, however, and over time, she began to resist her teacher's efforts. The conflict escalated to the point where the teacher slapped her on the left shoulder with a ruler whenever she saw her using her left hand to write. Such treatment was increased and intensified, and of course, the student resisted more adamantly. Eventually, the student was referred to the principal as a "trouble making, discipline problem; a child obviously in need of psychiatric treatment." Two things then evolved. She was taken for psychiatric counseling, *and* she was transfered to a different classroom in a different school. She recalled that in her new school with her new teacher she felt loved, accepted, and encouraged. Given such treatment, the need for psychiatric treatment soon abated. With which hand does she write today? As you probably suspect, she comfortably writes with her left, and I might add, quite legibly so. There are many such stories. We all know of far too many of them.

My lighter side suggests to me, however, that there are schools that work, and teachers who care deeply about children; and they prove it. The example above supports this belief, and I know of many other such positive school environments where children are treated with dignity and respect.

For me, all this suggests that we must find constructive ways to live with one another. We must recognize our fallability as human beings and strive to increase our capacity to relate with compassion, sensitivity, and love. We must come to care deeply for each other and to trust one another in order to ensure our peaceful co-existence.

So how do we do this? What are the solutions to such problems as these? As any thinking person knows, there are no easy answers to such issues; no pat solutions applicable to the problems raised by Trippe and Mathey or for any that are raised throughout this monograph. One thing is certain though, the problem of school-induced pain is an important one, and one quite central to our understanding of emotional disturbance in general, and ourselves as human beings in particular; for how we choose to define who and what we are as human beings will always affect the way we perceive one another, the way we come to interact with one another, and the actions we pursue on behalf of one another.

We need to unravel this problem, and I am sure there are many ways to do so. I personally would find it useful, for example, if those who felt deeply about this problem would share their thoughts on how to alleviate it by proposing some prospective courses of action, including some suggestions for dismantling what we presently have in education that is dysfunctional, along with some suggestions for a more useful system to replace it (e.g., one more closely aligned, and directly supportive of the personal development of students). I feel such proposals would prove useful in at least two ways: 1) they would help to move us beyond a state of problem-raising rhetoric; and 2) they would pave the way toward improved educational service to children.

There is one final point I wish to make before moving on to another article. It seems clear that for a time in special education we had a tendency to remove children from the mainstream preferring a separate system of services for them. Since passage of PL 94-142, however, we have worked to clarify our service network, and thus have been able to modify such earlier tendencies. We now promote the concept of the least restrictive educational alternative for children and strive to mainstream handicapped children in appropriate ways. We must be sure that as we continue to pursue these worthy goals, we devote sufficient time within our training programs to the complexities involved in mainstreaming handicapped children. This aspect of training, at a minimum, should help our trainees to understand and integrate our belief system about children and the school experience, as well as provide them with the necessary communication and relationship-building skills to help them provide whatever assistance is necessary to the classroom teacher to ensure that his/her search for meaning and direction in this area is not misguided.

A similar observation has been made by Trippe and Mathey in their discussion of mainstreaming. My experience concurs with their perceptions and suggests to me that if we fail to promote a "match" between what a mainstream teacher thinks his/her role with handicapped children is (e.g., one of positive and productive involvement), and how he/she feels about that role (e.g., a willing and supportive attitude), then we have no reason to expect that his/her behavior toward mainstreamed children will be at all productive. By not actively promoting such a match, our efforts to mainstream handicapped children will falter, and in all probability, we may only prolong the "at risk" status of our children within the educational mainstream.

Researched-Based Knowledge and Professional Practice

Lakin's article is one, in my opinion, which has been needed in our field for some time. He "tells it like it is," and I am pleased he does so.

For a period of time in our history, we seemed to lack a theory base that was clearly organized and discernible. I do not mean there was an absence of theory, but rather that what theory there was lacked universal awareness and organization. This situation has changed, and it is time that we take what we know of theory and use it in research that will lead to direct improvement of services to children in school. This task will not be an easy one.

Lakin provides us with some useful thoughts regarding this topic as well as some ideas on how we might proceed. His article will merit careful analysis by researchers for it provides a thoughtful review of not only our current research practices, but also what might be accomplished in the future.

It seems to me that a basic precursor to the implementation of a well thought out, coordinated, and integrated program of research will be the mapping out of a "nomalogical network" to help us accurately chart the parameters of the research to be undertaken (e.g., what, with whom, in what way, to what extent, with what expectations). In this way, research might have a better sense of connection to both theory and practice in that

theory might clarify the parameters of needed research, and practice might clarify the value of research outcomes over time. I am confident that we are more than capable of meeting the challenge of conducting research on meaningful topics in our field with meaningful outcomes, but such research should also be useful. Most research will be useful if it has practical value to teachers and if the results are communicated to teachers in a simple and straight forward manner. If we view this as a serious challenge, and act accordingly, I have no doubt that more research will be used by more teachers to the benefit of children.

This point is similar to one of Lakin's and approximates a point made recently by Hollifield (1982). In summarizing the results of a research questionnaire he conducted with teachers, Hollifield suggests that,

> "Some teachers do use education research to improve their educational practice. Others would like to, but find there is a long way between being told 'what to do' and actually knowing 'how to do it.' Still others find research results to be utterly useless." (p. 60)

My experience suggests that teachers are willing to learn new and more appropriate ways of being with children. In fact they are eager to do so. What they object to is theory and research unrelated to practice. Such an objection should not be construed as anti-intellectual sentiment on the part of teachers, but rather as a reflection of their need to learn what needs to be learned quickly and efficiently in order to apply it successfully in their work with children. Those who engage in writing projects, the intent of which are to influence educational practice, must bear this in mind and strive to find ways of expressing themselves that facilitate, rather than obfuscate this learning need.

To Punish or to Heal. . .

This is a beautifully written, comprehensive article that should have a significant influence on future educational practices with emotionally disturbed children.

As in the Lakin article, there appears to be some sentiment expressed that the time is ripe for improved accountability regarding our thoughts, feelings, and actions on behalf of children. It is hard to negate our need to do this, at least to some extent. It seems reasonable to me that we must begin to broaden our discussions of conceptual issues to include discussion of specific guidelines for helping children learn the necessary skills they will need to learn in order to live life fully and with a sense of harmony and personal integration.

Rezmierski and Rubinstein help us to look at this issue in two ways: 1) they provide us with an indepth analysis of conflict and its stressful consequences for teachers and students within a school-related context; and 2) they help us get in touch with the importance of skill in personal problem solving as a central factor in facilitating the helping process. I wish to discuss each of these in turn.

Teaching disturbed children is one of the most exciting, challenging, creative, frustrating, nerve-fraying occupations I know. It just is, and any teacher who does it for a living will tell you so. We expect and we hope that all teachers will always be psychologically mature and consistently therapeutic in their work with children. We also expect a highly effective and humane level of performance from our educational institutions. There is nothing wrong with having such expectations. In fact, they are healthy, for they give us some useful and idealistic goals to pursue as educators. What I think is important is not only the acknowledgement of such goals by Rezmierski and Rubinstein, but also an acknowledgement, as well of our fallibility regarding them. These authors understand our tendency to miss the mark, to fall short of meeting such standards within ourselves and in our work with children. In addition to their level of insight into such matters as these, these authors take the time to help us see why this is so and provide us with a sense of direction for improving ourselves if we choose to do so.

Ultimately, we must not forget that human beings are just that — human beings. Thus, any stressor in life, any person, event, or situational transaction that is perceived as painful by a person, will be responded to in a manner designed to reduce or eliminate that pain. This is a simple truth, yet one, unfortunately, that is at the core of much school-related discord. People in school, must take the time to develop the necessary insights regarding school- and life-related stress, and its effects on human beings. They must also take the time to master the necessary skills to help them live within themselves and with each other in a more compatible and adaptive manner.

Literature on stress and stress mediation is becoming more and more available, and there are now several useful approaches available to facilitate this process (e.g., ways to learn about what stress is, what the effects of stress are on a person, and what can be done in response to it). The larger issue, however, has to do with the extent of our commitment as educators to the value of personal development for ourselves as well as for our children. Institutions can change the way they function, and people can change the way they act toward and respond within the institution to one another. But such change will not occur in a vacuum. It can only come from a perceived need to change and a commitment to actively participate in bring such change to fruition.

Suffice it to say, the ability to problem solve is one skill that is necessary to successfully mediate stress in school or life in general. This is so because knowing and doing go hand in hand in this area, and the vehicle that facilitates this "bridge" between cognitive insight and behavioral change in problem solving.

The Rezmierski and Rubinstein article provides us with two distinct methods for solving problems. Each has its individual merits and each may be more or less useful to the helping person depending on the circumstances involved. For me, the important point is that **each** person understand the purpose and function of problem solving in the mediation of stress and have a personal system for solving problems that works to not only mediate the occurrence of painful stressors, but that increasingly leads to more successful adaptation to stress over time.

To the extent that the problem-solving systems described by Rezmierski and Rubinstein function to guide children and school personnel toward more successful adaptation, these authors will have succeeded in fulfilling their respective vision of how the

process we call schooling will unfold for troubled children.

Pills or Skills . . .

O'Leary has written a very interesting article on a complex problem, and I suspect it will be well received by researchers or those who find the scientific method interesting. O'Leary's suggestions regarding the research needed on this problem and the issues that will need to be addressed in conducting research are in some ways similar to those identified by Lakin. Such convergence of thought on research is important because it brings us closer to reaching a consensus on what we want to accomplish and how we wish to proceed to do so. I was especially pleased with the suggestion by O'Leary that, "At a minimum, researchers from different sites should coordinate their efforts to begin to allow us to reach conclusions that are not plagued by idiosyncrasies of particular therapists, programs, or contextual variables. . ." My comments regarding the need to develop a well thought out, coordinated, and integrated research plan are compatible with this perspective and further suggest that we can ill afford the continued luxury of exclusively pursuing our research goals in an independent and isolated manner. The problems are much too complex, the resources are too few, and the consequences much too serious for us not to seek each other out, to collaborate with one another in conducting our reseach on behalf of children.

Federal and state agencies sometimes sponsor "Institutes" or "Think Tanks" where leaders in a field of study come together to discuss a specific topic and/or engage in problem-solving sessions. Hyperactivity in children is certainly a critical problem and one deserving of quite careful scrutiny. I hope some form of subsidized study group is forthcoming. If such an institute were convened, three goals for possible consideration might be: 1) the development of a comprehensive statement regarding the central research questions; 2) a framework for conducting needed research within a collaborative context; and 3) the development of a "convergence grid" matching differentiated problems with alternative intervention possibilities.

Teachers will find O'Leary's article of considerable interest for there are elements within it that relate specifically to the problems inherent in teaching hyperactive children. Most of us as teachers desire to improve our instructional capacity. Thus, we seek our information that tends to "fit" our needs more closely, than say, theory on research data might. As we explore theory and pursue our meaningful research projects, we must not forget to devote sufficient time and energy to trying out materials and procedures that may have practical value, *and* to finding ways of expressing what we learn in clear and useful language in order to enhance its usability by teachers.

As pointed out by O'Leary, how we approach the teaching process with hyperactive children will depend, in part, on the nature of the problem, its severity, duration, and potential tractibility. In an intuitive sense, it seems quite logical that: 1) some hyperactive children may be helped to learn in school if some consideration is given to their dietary needs; 2) others may well profit from a carefully controlled program of exercise; 3) still others may need a carefully designed behavioral learning program that would include provisions for the development of insight on the part of the child regarding his/her problem and what to do about it; and 4) some children may need medication for at least some period of treatment. Perhaps most children will need many, if not all of these interventions, along with still other possibilities.

Regardless of form, what we seek when we intervene with a child is a match between the needs of the child and the procedures that we use to help the child succeed in school or life. This is the critical criterion we seek regardless of the path we take to achieve it. It has always seemed preferable to me to keep an intervention program as simple and as least disruptive to the child as necessary. The less complex it is, the better for all concerned. It is also my bias that any form of pharmacological treatment for hyperactivity should be considered as a last resort, and that when used, it be cautiously monitored for its effects on the child. Medication is a serious form of adjunctive treatment. It should remain so, and never become a substitute for careful teaching within an appropriate and therapeutic context.

A Perspective on the Use of Behavioral Strategies

I plan to recommend this article to my teacher trainees. I think they need to read it, digest it, and incorporate its essence into their emerging sense of identity as teachers of emotionally disturbed children. Quite frankly, I enjoyed this article by Simpson and Sasso. I found it to be the first conceptually open and flexible statement regarding behaviorism and its potential as an educational resource that I can remember reading in some time, and I think it helps to put the use of behavioral technology in perspective. This is not an arrogant article, nor is it a foot dragger. It is a clearly written statement of the potential contribution that behaviorism can make to educational planning, and it is also a clearly written statement of what behaviorism is not.

There is little that I wish to add to what is said in this article. I believe its tone to be **psychoeducational** in nature, which, to my way of thinking, is a useful departure from the either/or dichotomy (e.g., emphasis on overt behavior vs inner life perspective) which can get in the way of a more rationale integration of the more applied aspects of the various theoretical orientations in our work with children. In short, the article emphasizes our similiarities rather than our differences, and that is as it should be. I especially enjoyed discovering the following passage, and I feel it reflects a useful sentiment. . .

> "Educators who fail to establish effective interpersonal relationships with their students, who do not practice effective teaching methods, and who fail to provide suitable curricula for their pupils cannot be expected to produce significant changes in student behavior regardless of how well they make use of behavioral technology. In other words, teacher success in applying behavioral intervention procedures is in direct proportion to other

educational skills and to the teacher-student relationship."

There is a consistent emphasis on the importance of establishing and maintaining a facilitative, interpersonal relationship with children in this article, which I was pleased to see. I believe this is a central aspect of helping children to develop, for through the teacher-student relationship the child receives the feelings of trust, safety, and security she/he will need to take the necessary risks that must be taken to ensure adaptive growth.

There was another theme I sensed within this article. Essentially, I feel these authors are suggesting that "good teaching" is "good teaching" whether it be in this field or any other, and this is so regardless of one's theoretical persuasion. I believe this too, and I suggest the reader give most careful attention to the list of competencies presented in this article, for they provide some personal goals for educators that are well worth seeking.

The final aspect of this article I wish to comment on pertains to generalization of behavior. Although generalization is hard to achieve with students, it remains a critical factor for consideration by a teacher.

It seems important that any learning program should help a child gain insight or an understanding of his/her behavior (e.g., its meaning and its consequences). Insight, along with a basic understanding of the problem-solving process, appear necessary to ensure the success of any program designed to help students get from where they are to where they want or need to be when there is no one else around to tell them what to do or how to do it. It also seems important to me that students acquire a sense of personal responsibility and that they be motivated to learn not only adaptive behavior, but also how to generalize it from one person or situation to another. I hope that the emerging area of cognitive behaviorism will become a useful vehicle for helping students to better accomplish such personal goals.

The ability to achieve insight, along with skill in solving problems in an adaptive manner will depend, in part, upon the child's capacity for cognitive complexity. The greater the capacity in this regard, the more self-understanding and problem-solving skill will be possible. It also seems more likely that generalization of behavior will take place if the context for such learning has a structured communication system associated with it; that is, a system wherein teacher and student communicate with one another, work together to set goals and procedures for reaching same, and where feedback on progress is ensured.

Research on generalization would appear to be a fertile area for intense investigation, for generalization skills **must** be learned by students if they are ever to be able to adequately master their environment.

Interpersonal Skills Training

This article offers some useful information on the subject of how to help children to learn social interaction behaviors.

Improving children's interpersonal skills is a reasonably complex undertaking and it is another area of learning that suffers from generalization problems. I was quite impressed with the comments of these authors as to why this might be so, and I believe as they do, that it is plausible to suspect that,

> "First, early efforts to improve children's interpersonal skills promoted an approach that led to the application of behavioral technologies prior to a full understanding of what competent behavior was in the first place. . .
>
> Second, earlier research promoted a rather narrow conceptualization of interpersonal behavior as a bundle of operant responses with obvious antecedents and consequences. . .
>
> And third, the behavior modification literature in general has emphasized singular solutions to what is an exceedingly complex phenomenon."

One reason for these problems may be the direction that has been taken to accomplish objectives in this area. Teaching children discrete behaviors independent of insight and without regard for transfer of training, as I have already stated, will prove a less productive strategy. It also seems important to me that those concerned with helping children to further their development in the interpersonal domain give serious thought to interpersonal **style** as a training factor.

We know that there are some styles of relating that are more useful, acceptable to others, and that facilitate human discourse. We also know of interpersonal styles that do not accomplish such ends. By clarifying the type of interpersonal styles we have in mind for children — what they are and their component parts — we should be able to help children learn specific behaviors that are part of a pattern of skills that are based upon a conceptual framework for intepersonal functioning.

I do believe that all problems lend themselves to the same solution or that it is possible to apply the same "cognitive set" to the examination of problems or problem situations. It has always seemed to me that problem solving by deductive methods was different than problem solving by inductive ones and that depending on the problem, one approach would prove more useful than the other. The interpersonal area of inquiry may well be one where we will find it preferable to consider a deductive rather than inductive approach to problem solving, as well as an interdisciplinary form of study and research rather than any form of ideological isolationism.

In Summary

The word synergetic means to work together, to cooperate. This is a useful sentiment for us to give some thought to at present. Our recent past has been expansionistic. We have grown and matured as an area of special education. Yet in some ways, we appear to have stayed the same; to have made very little progress. For example, we still seem to be preoccupied with terminology, identification of children, and the use of labels. We still seem to lack synthesis regarding research; to understand its meaning to the field in general, and its relationship to practice in particular. We still seem confused regarding whether we want to emphasize our ideological differences or our similarities as we search for meaning in our work with children. We still seem to be fragmented regarding our sense of

priorities; our direction as a discipline; and we still seem to know of far too many children for whom the school experience remains a noxious and psychologically painful stressor.

I believe these issues to be real and tangible obstacles to our progress. I also believe them to be something we can do something about if we choose to. Certainly any nation that can place a man on the moon and explore the far reaches of the universe can reasonably hope to resolve such issues as those that have been raised within this monograph.

These are hard times for children, and they need us now more than ever. We must keep them central to our thinking and become more willing to synergetically apply ourselves to discovering the most useful ways to help them grow with dignity and a sense of personal integration.

Resources

Hollifield, J. H. "Teachers Tell All." *Today's Education*, 71(1), (Winter, 1982) pp. 60-61.

Long, N. J. "The Conflict Cycle," *The Pointer*, 24(1), (Fall, 1979) pp. 6-11.

Maslow, A. *Motivation and Personality* (2d ed.) New York: Harper & Row, 1970.